Pressure-Distribution Measurements on a Transonic Low-Aspect Ratio Wing

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NOMENCLATURE

Symbol	Computer Symbol	<u>Definition</u>
a	ALPHA	angle of attack, deg
b/2	B/2	wing semispan
с		local wing chord
cav		average wing chord, S/b
ē	MAC	wing mean aerodynamic chord, (2/S) $c^2 d(2y/b)$
	CONF	configuration identification number
e _r	CR	root chord
c _t		tip chord
c_p	CP	pressure coefficient, $(p - p_{\infty})/q$
M	MACH	free-stream Mach number
n	n	nondimensional spanwise distance from wing root, 2y/b
p	P	free-stream static pressure, psf
p _t	PT	free-stream total pressure, psf
q	Q	free-strem dynamic pressure, psf
Re/ō	RN/L	free-stream unit Reynolds number, M per ft
Re	R N	Reynolds number based on \bar{c} , M
S/2		area of semispan wing model
t _t	TTR	free-stream total temperature, °R
x	X	chordwise distance rearward of leading edge

```
x 1
                      chordwise distance from 0.25c (wing pitching-moment axis) to
                         0.25c (section pitching-moment axis), 0.9559(c - \bar{c})
у
         Y
                      spanwise distance outboard of wing root
Wing Section Aerodynamic Characteristics
          CNS
                      wing-section normal-force coefficient
c_n
          CNC/
                      section normal-load parameter, c_n(c/c_{av})
          CMS
                      wing-section pitching-moment coefficient about c/4
c_{m}
c'm
                      wing-section pitching-moment coefficient about the wing
                         pitching-moment axis passing through 0.25c,
                         c_m + (x'/\bar{c})c_n, used in C_M
                      section pitching-moment parameter, c_m'(c/c_{av})^2
          CMC/
          XCPS
                      wing-section chordwise center of pressure, % chord
<sup>X</sup>cp
Wing Aerodynamics Characteristics
C_{R}
          CB
                      wing bending-moment coefficient; moment axis is wing root chord
                      wing normal force coefficient
          CN
C_N
                      wing pitching-moment coefficient; moment axis passes through
\mathsf{c}_{\mathsf{M}}
          CM
                         0.25c, see c'm
                      wing chordwise center of pressure, % mean-aerodynamic chord
          XCP
X_{CP}
          YCP
                      wing spanwise center of pressure, % semispan
Y_{CP}
Subscripts
L
          ( )L
                      lower surface
```

U

()U

upper surface

SUMMARY

Surface-pressure distributions and oil-flow photographs are presented from wind-tunnel tests of a large-scale (0.90 m) semispan model of NASA/Lockheed Wing C, a generic transonic, supercritical, low-aspect-ratio, highly three-dimensional (3-D) configuration, designed to conduct 3-D boundary-layer tests. The wing was designed using a 3-D, transonic, full-potential-flow wing code (FLO22) and an optimization routine. Tests were conducted at the design angle of attack of 5° over a Mach number range from 0.25 to 0.96, and a Reynolds number range of 3.4×10° to 10×10°. Pressures were measured with the suction slots of the tunnel floor and ceiling open for most of the tests but taped closed for some tests to simulate solid walls. This paper presents the surface-pressure measurements and the oil-flow patterns, obtained to determine the extent of 3-D surface flow in preparation for the boundary-layer measurements. A comparison is made with pressures from a small-scale model tested at the same Reynolds number in a high Reynolds number facility by Lockheed-Georgia Company and with predicted pressures using two 3-D, full-potential-flow, transonic wing codes: design code FLO22 (nonconservative) and TWING code (conservative).

At the design Mach number and angle of attack of 0.85 and 5°, the most prominent features in the oil-flow patterns were the unexpected local-flow separation that occurred in the outer 30% of the semispan and the lack of 3-D boundary-layer flow over the rest of the wing. The local separation was caused by a strong, local, shock-wave/boundary-layer interaction that was not a tip vortex effect. The flow separation increased as the Mach number was increased to 0.95, but disappeared when the Mach number was reduced to 0.82 where the surface oil-flow angles were less than 10° over most of the wing. The main wing shock wave was unsteady at a low, irregular frequency of ~3 Hz, inducing unsteady pressures to the trailing edge.

Comparing large-scale and small-scale data from two wind tunnels with each other and with predictions can be difficult due to wall interference and model boundary-layer effects. The comparisons herein show that the method of matching leading-edge pressures appears to be one satisfactory way of selecting the experimental angle of attack to correlate the experimental and predicted pressure distributions. Using this method, predictions by FLO22 and TWING codes agree rather well with each other and with the experiments, except for small variations in shock position and aft loading. It is shown that the flow separation at the design conditions might have been avoided by further iteration in the design.

Wall-interference effect was effectively demonstrated when the floor and ceiling suction slots were taped closed to simulate solid walls, and the normal-force coefficient increased tremendously from 0.52 to 0.65.

The lack of 3D boundary-layer flow on Wing C raised the question: under what design conditions are wing boundary layers significantly 3-D for unseparated flow? Evidence presented from this study and from other cited wing studies indicate that wings that are optimized for mild shock waves and mild pressure-recover gradients generally have small 3-D boundary layer flow (flow angles less than 10°) at design conditions for unseparated flow. Additional evidence from another cited wing study indicates that in some wing designs the optimization is relaxed to allow the boundary layer to approach separation at the design conditions, which induces significant 3-D boundary-layer flows near the trailing edge.

INTRODUCTION

In recent years, significant advancements have been made in computational methods for the design and analysis of transonic flow about wings. There is a continuing requirement, however, to assess the accuracy and efficiency of current computational methods by systematic comparisons with reliable experimental data. To contribute to the current efforts to validate existing inviscid and viscous numerical codes, the Aeronautics Research Branch of Ames Research Center (ARC) engaged in two cooperative studies of several wing models to obtain 3-dimensional (3-D) pressure distributions and boundary-layer data. This paper presents results from the ARC contribution to the first study and contrasts these results with those of the second study.

In the first study with the Lockheed-Georgia Company, a cooperative computational-experimental investigation was conducted to obtain pressure-distributions and 3-D boundary-layer data on a generic model of a modern, highly three-dimensional, advanced-technology wing configuration. The wing was designed using a 3-D, nonconservative, full-potential-flow, transonic wing code (FLO22) and an optimization routine. A highly swept, low-aspect ratio wing was selected that had supercritical airfoils with relatively thick sections, moderate aft loading, mild shock waves, and a mild pressure recovery. The result was a highly optimized wing (designated Wing C), designed for unseparated flow at a design Mach number of 0.85 and a design lift coefficient of about 0.5 at an angle of attack of about 5°. A small-scale semispan model of Wing C was tested by Lockheed-Georgia in their high Reynolds number facility (the Compressible Flow Wing Tunnel (CFWT)) at a Reynolds number of 10 million, based on the mean aerodynamic chord. In addition, two other small-scale models were designed and tested: a transport-type wing and a fighter-type wing (designated Wings A and B). Surface pressures were measured on the wing and on the tunnel walls for comparison with calculations of wall effects on the boundary conditions from Computational Fluid Dynamics (CFD) codes. Hinson and Burdges published both the small-scale data in reference 1 and a comparison of the small-scale measurements with several 3-D transonic inviscid codes in references 2 and 3. Lemmerman and Atta published predictions of the boundary-layer thickness and skin friction, made with several 3-D transonic boundary-layer codes in reference 4.

This paper presents the results from the ARC contribution to the Lockheed Georgia cooperative program: tests of a large-scale (0.90 m) semispan model of low-aspect-ratio Wing C, built to obtain thick boundary layers for ease of measurement in a large wind tunnel (the Ames 6- by 6-ft Transonic/Supersonic Wind Tunnel). Surface-pressure measurements, oil-flow studies, and boundary-layer surveys were obtained at several wing stations at the design angle of attack of 5° over a Mach number range of 0.25 to 0.96 and a Reynolds number range of 3.4×10^6 to 10×10^6 . Wing pressures were measured with the tunnel floor and ceiling suction slots open for most of the tests but then taped closed for some tests to simulate solid walls for comparison with predictions of tunnel-wall effect. The measured pressures are compared with the small-scale wing pressures and with the predictions from two 3-D, full-potential-flow, transonic wing codes: design code FLO22 (nonconservative) and TWING code (conservative). Selected measurements and computations of surface-pressure distributions and photographs of oil-flow tests were published in reference 5.

Although a number of computational-experimental comparisons have been made in recent years, the present test results are enhanced by results from two different models in two different wind tunnels. The major objectives of the discussion are to consider the extent of 3-D boundary-layer flow at the design condition (as indicated by the oil-flow tests), in preparation for the boundary-layer tests; the cause of the unexpected occurrence of local-flow separation at the design condition; the effects of tunnel-wall interference on the effective lift and Mach number of the two models tested in the two tunnels; and the general success of the predictions of the pressure distributions.

In the second afore-mentioned cooperative study, Spaid of McDonnell Douglas Research Laboratory, thoroughly investigated the boundary-layer characteristics of a semispan wing-transport model (ref. 6). The resulting combined research effort of the cooperative studies (refs. 3 and 6 and the present results) constitutes a substantial contribution to the data base and the analysis of computational fluid dynamics: i.e., data from three widely different small-scale models, data from two different-size models tested in two different wind tunnels, data for both small and large 3-D boundary-layer flow, and data for both unseparated flow and for shock-wave/boundary-layer separated flow.

The author wishes to acknowledge the substantial efforts of B. L. Hinson, K. P. Burdges, and L. A. Lemmerman of Lockheed-Georgia Comapny in the design of the wing and the contribution to the cooperative test planning; to the NASA Model Development Branch, J. Peterson, Chief, for supervising the building of an outstanding model; to D. Penna, CALSPAN, Inc., for his extensive contribution as project engineer in charge of the wind-tunnel test; to M. Wright, CALSPAN, Inc., for an extensive computer program, to G. Reynolds, CALSPAN, Inc., for the excellent oil-flow photography; to Informatics, Inc., (Joan Thomson and others), for computations and plot designs; and to Raymond Hicks, Ames Research Scientist and Computational Fluid Dynmaic Specialist, for his important contributions to the design of the wing and to the analysis of the comparisons of experiment and predictions.

WING DESIGN

Figure 1 shows planform sketches of the three wings, A, B, and C, which were designed for the Ames/Lockheed-Georgia Company cooperative computational/ experimental investigation of transonic wing-design technology. Wing A was intended to represent a high-aspect-ratio transport wing, and Wing B a moderate-aspect-ratio fighter wing. Wing C is a generic design, not intended to represent any existing full-scale wing.

Wing C (fig. 2), the subject of the present study, was designed for the cooperative research program by R. Hicks and B. Hinson, aerodynamic computational specialists for Ames and Lockheed Georgia, respectively. (Refer to ref. 7 for a discussion of some examples of successes and failures of transonic potential-flow codes.) Wing C is a highly 3-D low-aspect-ratio configuration, selected to be consistent with the test requirements that the wing have a large leading-edge sweep angle (45°) and a large mean-chord length to develop a thick, more easily measured boundary layer. It was decided not to design specifically for a strong 3-D flow but to optimize the design for a moderate aft loading, mild shock waves, and a mild pressure recovery. However, it was felt that a strong 3-D boundary layer would result by selecting a highly swept, low-aspect-ratio wing. The design condition selected was a Mach number of 0.85, and a lift coefficient of about 0.5, occurring at an angle of attack of 5°.

Two existing computer codes were used: FLO22 (ref. 8), an aerodynamic analysis program based on a relaxation solution of the 3-D, full-potnetial-flow equation, and a numerical optimization program based on the method of feasible directions (ref. 9). The FLO22 code was developed for analyzing inviscid, isentropic, transonic flow past 3-D swept wings. Weak shock waves are automatically located whenever they occur.

The design of the wing sections began by specifying the desired pressure distributions. For simplicity of construction, only two design control stations were selected (n = 2y/b = 0.065 and 0.91) so that linear lofting could be used between the root and tip stations. The specified design pressure distributions (shown for Wing C in fig. 3) were chosen to produce two objectives: a mild shock-wave pressure recovery from leading-edge suction pressures (accomplished by limiting leading-edge local Mach numbers to the commonly accepted maximum value of 1.2 normal to the leading edge for no flow separation), and a mild pressure recovery behind the shock wave to the trailing edge (which gave a moderate aft loading). The airfoil shapes were allowed to vary at the two control stations by minimizing the RMS deviation between the computed and the pre-selected design pressure distributions by appropriate modifications to the wing geometry, including chordwise camber and spanwise twist, using the FLO22 transonic solutions. Estimates of boundary-layer displacement effects, made by Lockheed/Georgia with an explicit-formulation 3-D code, indicated that the boundary layer did not significantly affect the design pressure distributions. The pressure distributions appeared to the designers to be well behaved. The larger percent thickness of the tip airfoil (10%), compared to the

root chord (6%), appeared to be acceptable and was retained (fig. 2). Final theoretical root and tip airfoil coordinates for Wing C are listed in table 1.

Typical calculated inviscid characteristics of the final design plotted using computer graphics programs developed at Ames for FLO22 code are shown in figures 4 to 7. Figure 4 shows carpet plots of chordwise pressure distributions, and selected chordwise pressure distributions covering the range of n = 0.73 to 0.93. Figure 5 shows surface plots of velocity vectors, streamlines, isobars, and Mach-number contours. Figure 6 presents plots from a numerical chordwise cut of the flow field in a vertical plane at the midsemispan station showing flow field grid lines, pressure contours, Mach-number contours, and density contours. Computations at other span stations can be plotted. Figure 7 presents spanwise plots of load distribution and pitching-moment distribution.

TEST FACILITY

The Ames 6- by 6-Foot Transonic/Supersonic Wind Tunnel was chosen because the allowable model size and the tunnel operational characteristics were suitable for boundary-layer research. The tunnel is a variable pressure, continuous flow facility. The nozzle leading to the test section is of the asymmetric sliding-block type that permits a continuous variation of Mach number from 0.25 to 2.3. The test section has a slotted floor and ceiling with 6% porosity with provisions for boundary-layer removal. The turbulence-velocity level is high, measured to be about 1.5% of the free-stream velocity.

MODEL DESCRIPTION

A semispan (reflection plane) wing model was designed to be mounted on the tunnel wall because of its convenience and access to the instrumentation (fig. 8). Wing-root flow disturbances were not felt to be a problem because the flow would not be separated at the design test condition. It was not intended to test the model at high angles of attack where extensive separation would be present. A wing semispan of 0.90 m (which is about one half of the facility test-section width) was selected as a suitable size, giving a test-section blockage ratio of 1.3% at zero angle of attack. This is considered to be a reasonable value to avoid severe tunnel-wall lift-interference effects. The wing was constructed from 17-4 PH stainless steel to minimize dynamic-load deflections and corrosion. The measured construction tolerance was ±0.12 mm (0.005 in.) over most of the surface and ±0.24 mm (0.010 in.) at the extremities.

INSTRUMENTATION AND ACCURACY

The pressure instrumentation consisted of 229 orifices on the wing, installed at five spanwise stations (n = 0.1, 0.3, 0.5, 0.7, and 0.9), and 203 orifices on the tunnel-wall turntable. Orifice locations are listed in the sample tabulation of pressure data in table 2. In order to provide a smooth orifice installation, the wing orifices (0.50 mm diameter) were installed by the electronic-discharge method, in which an accurately controlled hole was burned perpendicular to (parallel to and below) the surface into a subsurface cavity. A tube-sized cavity (1.0 mm diameter) was burned parallel to and below the wing surface, a tube was inserted into the cavity, and the junction was sealed with epoxy. The tubes were installed in channels in both wing surfaces that were machined to within about 1.2 cm of each orifice (fig. 8(c)). The machined channel in the upper surface was filled with an epoxy resin and the channel on the lower surface was covered with a removable plate in order to provide access to the tubes and instrumentation wires. Finally, the wing surface was finished to its final dimensions. An accelerometer was installed in the wing tip to measure the frequency and amplitude of the vibrations of the steel wing which was designed to be rigid.

Surface static pressures on the wing and wall were measured using electronically actuated pressure-scanning valves containing pressure transducers that were connected to an automatic data recording system. Each survey of the wing and wall pressures required about 4 min to complete. The self-calibrating feature of the scanning valves provided an accuracy of about one-quarter percent of full scale of the ± 8.62 N/sq cm (± 12.5 psi) transducers, between ± 0.006 and ± 0.01 in pressure coefficient at transonic speeds. Tunnel test conditions were measured with precision manometer followers having an accuracy of about ± 34.5 N/sq m, giving a Mach number accuracy of about ± 0.002 . Mach-number steadiness and controllability was about ± 0.003 at M = 0.85 to 0.95. Tunnel-static pressure was measured on the tunnel wall 2.4 wing-root-chord lengths ahead of the wing-root leading edge. Angle of attack was set manually by rotating the wall turntable and setting the angle with an inclinometer with an accuracy of $\sim \pm 0.03$ °.

TEST CONDITIONS AND PROCEDURES

Pressures were measured over the wing and wall at Mach numbers from 0.25 to 0.96, and Reynolds numbers from 3.4×10^6 to 10×10^6 . Since the angle of attack could not be set by remote control, the investigation was conducted at the design angle of attack of 5° . The test conditions are listed in table 3.

Wing and wall pressures were measured without boundary-layer trips on the wing. Tufts and oil dots were placed at the wing-root junction to observe the flow. Next, boundary-layer trips were installed on the wing using sifted glass spherules at 4.5% chord and sublimation flow-visualization tests were made to determine an effective size. A supersaturated solution of biphenyl chemical $(C_5H_5C_6H_5)$

dissolved in petroleum either was sprayed on the model, which was then lightly sanded with smooth paper. Two final trip sizes were selected: 0.16 mm (0.0063 in.) diameter (No. 100 mesh) trips were used on the lower surface and outboard of 60% span on the upper surface; 0.23 mm (0.0090 in.) diameter (No. 70 mesh) trips were required on the upper surface over the inboard 60% span due to the larger leading-edge radius.

Next, wing oil-flow tests were made at several Mach numbers and Reynolds numbers. It was found that fluorescent oil on the metal surface could be adequately photographed in black light. The orifices were covered with clear, thin mending tape and the oil mixutre was applied in 1 cm wide spanwise stripes every 20% chord. These oil stripes flowed into a fairly uniform formation of chordwise streaks that were photographed during the test with a 70-mm camera mounted in the test-section ceiling plenum chamber. Oil streaks on the lower surface were observed and photographed after the test run. Finally, wing and wall pressures were measured with the wing boundary-layer trips. Additional pressures were measured at Mach numbers from 0.5 to 0.82 with the floor and ceiling slots taped to simulate solid walls.

Prior to the test in the 6-Ft Tunnel, the effect of wall mounting on the wingroot flow was investigated in a preliminary experikment in the Ames 2- by 2-Foot Transonic Wind Tunnel at Mach numbers up to 0.94, angles of attack up to 9° and a Reynolds number of 2.6 M using the Lockheed small-scale, 0.26 m semispan Wing C model.

DATA REDUCTION

Static-pressure measurements were reduced to standard pressure coefficients using the tunnel conditions measured at the beginning of each data set, following which the tunnel pressures were adjusted for total-temperature changes as required during the test run. Two or three data sets were recorded and the pressures were averaged because of noticeable effects of unsteady pressures. Pressure coefficients for each spanwise station were numerically integrated by Simpson's rule to determine wing-section normal-force and pitching-moment coefficients. Total normal-force and pitching-moment coefficients were also determined by Simpson's-rule numerical integration of the span-load and pitching-moment distributions. Machine plots of chordwise pressure distributions were also obtained and plots could be generated immediately after each test run.

TABULATED RESULTS

The wing and wall pressure coefficients and the integrated normal-force and pitching-moment coefficients are tabulated on microfiche records along with plots of chordwise pressure distributions. These are provided in a pocket in the back of

this report (appendix A) for the test conditions listed in table 3. A sample tabulation is given in table 2. All symbols are defined in the Nomenclature section.

DISCUSSION

Wing-Wall Junction Flow

The first research task was to determine the flow condition at the junction of the wing with the tunnel wall to determine if there was a problem with major flow separation. This problem was first investigated experimentally prior to the 6-Ft Tunnel test in the Ames 2- by 2-Foot Transonic Wind Tunnel on the small-scale Wing C model (0.26 m semispan). Oil flow tests were made at Mach numbers up to 0.95 and angles of attack up to 7° at Re = 2.6 M. The tunnel-wall boundary layer, calculated to be about 1.9 cm, is about the same ratio of the wing semispan as that for the 6-Ft Tunnel where the boundary-layer thickness has been measured to be about 8 cm. The oil streaks indicated that the flow was not separated at the wing root; however, there was a slight outflow over the rear third of the root.

In the 6-Ft Tunnel the wing-root flow was observed at $a = 5^{\circ}$ using oil dots and tufts, and the flow was similar to the flow observed in the 2-Ft Tunnel; no wing-root flow separation was observed.

Boundary-Layer Trips

The next research task was to determine the required size of the boundary-layer trips. A sublimation test was first made with no boundary-layer trips at Re = 10 M. A photograph taken by a camera in the tunnel ceiling plenum chamber, after a long run of about 30 min is shown in figure 9(a). Sublimation occurred back to about 10% chord, indicating that the flow is already turbulent in this region. Unexpectedly, over the rest of the wing the biphenyl was only partially sublimed, even though the boundary layer was certain to be turbulent over most of the wing. It is felt that the large size of the wing and the resulting large boundary-layer thickness inhibited the sublimation process.

Since some tests were to be conducted at lower Reynolds numbers, it was decided not to depend on natural transition and sublimation tests were made with boundary-layer trips placed at 4.5% chord, which was the same location at which trips were placed on the small-scale model (refs. 1 to 4). The photograph (fig. 9(b)) of the final sublimation test with the final size of glass beads, selected to ensure transition at the trip location (see Test Conditions for size), shows that the biphenyl sublimed immediately behind the trips due to forced transition.

Oil-Flow Visualization

Figure 10 shows photographs of oil-flow tests at M=0.85 and 0.82 at Re = 10 M. From previous experiments and calculations, the oil streaks over the wing surface are known to represent the surface skin friction lines. Tests were first made at the design Mach number of 0.85 (fig. 10(a)). The most prominent features in the flow pattern were the 3-D flow separation that occurred in the outer 30% of the semispan and the lack of 3-D boundary-layer flow over the rest of the wing. A faint trace of the main wing shock wave can also be seen by the slight S-curvature in the oil streaks, crossing the inboard 2/3 semispan, between 15% and 25% chord.

The local separation in the outer third of the semispan was caused by a strong shock-wave/boundary-layer interaction, as determined from the measured pressure distributions. A separation front exists along the shock wave at about 40% chord with flow around each end forming vortices, indicated by the focil at each end of the oil-flow pattern. The flow separation is localized to the outboard region, but it is not part of the wing-tip vortex flow. Also, the oil streaks show that the flow is not separated at the trailing edge. The pair of vortices from the pair of focil must lift off the wing and trail downstream. Air flows around and under the vortices coming together between the vortices; the air entrained in the vortex circulation flows forward and exterior air flows rearward, forming a saddle point on the surface, which can be seen in the oil flow.

The unexpected flow separation at the design test condition has inspired some attempts to calculate the flow pattern using the full Navier-Stokes computations. One such attempt is reported by Monsour (ref. 10). The results of this computation do not appear to match the results of the present oil-flow pattern. However, it is very interesting that Monsours's computations are similar to the oil-flow pattern obtained on the small-scale model in the Ames 2-Ft Tunnel at $a=8^{\circ}$ and 9° (not shown), in which a leading-edge separation vortex was prominent.

Inboard of the separated area the surface-flow angles were small over most of the wing, less than 10°, except near the leading edge. At the trailing edge the measured flow-direction angle was 8° outboard at the midsection. The predicted inviscid surface-flow-direction angle at the trailing edge (fig. 5(a) and (b)) is about 5° inboard so that the total change in flow angle through the boundary layer was only about 13°; hence, the boundary-layer flow is not very three dimensional.

Next, the Mach number was reduced to 0.82 (fig. 10(b)) where the flow separation disappeared. Only the weak design shock wave is observed in the oil-flow pattern, indicated by a slight S-shape in the oil streaks near 20% chord; this shock wave did not separate the flow. The most prominent feature is the lack of three-dimensionality in the flow pattern. The flow-direction angles were less than 10°, except near the leading edge. This was also true of the flow on the lower surface, as determined by post-test visual observation. Early in the design, it was expected that a low-aspect-ratio wing with large leading-edge sweep angle would have a large significant 3-D boundary-layer flow. Evidently, this is not necessarily the case. These results and those that follow show that this lack of three dimensionality

results from the wing design process in which the wing was optimized for a mild shock wave and a mild pressure recovery.

At this high Reynolds number of 10×10^6 , the available Mach number range was limited, and so the Reynolds number was reduced to 6.8×10^6 and the effect of Mach number on the oil-flow patterns was investigated at M = 0.70, 0.82, 0.85, 0.90,. and 0.95 (fig. 11). This change in Reynolds number produced no effect on the oil-flow patterns at M = 0.82 and 0.85 (figs. 11(b) and (c)). At M = 0.70 the oil-flow pattern is similar to the attached-flow pattern at M = 0.82, except for the absence of the shock wave. Increasing the Mach number to 0.90 and 0.95 the flow separation that existed at M =, 0.85 over the outer 30% of the wing increased in extent and moved slightly rearward. Inboard of the separated region the flow-direction angles were still not very large at M = 0.90; however, at M = 0.95 a large outboard flow developed near the trailing edge where the boundary layer must have been highly three dimensional.

Decreasing Reynolds number to 3.4×10^6 produced no change in the oil-flow patterns at M = 0.82 and 0.85 (fig. 12).

Vapor-Trail Flow Visualization

In order to visualize the vortex flow off the wing at M=0.85 to 0.95 where separation occurred in the oil-flow patterns, the water-vapor content of the tunnel was increased until the vortex trails could be observed with the ceiling lights on. The trails could be seen only vaguely and could not be photographed; however, it could be seen that the separated flow field was unsteady, oscillating irregularly at a low frequency. In this type of flow dynamics the possible contributing influence of the wind-tunnel flow dynamics to the model flow dynamics is unknown.

Shock-Wave-Induced Unsteady Pressures

The output of the pressure transducers was recorded on an oscillograph to check for both pressure lag and unsteadiness. It was found that the lag was small for the 0.51 mm orifices with approximately 2.5 m of 0.8 mm I.D. tubing; however, a noticeable unsteady pressure existed for the midsemispan for M = 0.82 as seen in the oscillograph traces in figure 13. The maximum unsteadiness existed at the shockwave location at about 15% chord. The largest pressure fluctuations occurred at nearly regular intervals of about 3 Hz. Ahead of the shock-wave locations the pressures were relatively steady; however, behind the shock wave the pressures were unsteady to the trailing edge. In order to obtain mean values of pressure, two sets of data were recorded and averaged to partially compensate for the pressure unsteadiness. Figure 14 shows a comparison of one, two, and three-cycle averaged data with five-cycle averaged data. The shock-wave position changed as much as 2% chord from the averaged position, and the pressure coefficients behind the shock wave changed as much as 0.05 from the averaged value for a distance of about 20% chord. Shock-wave-induced unsteady pressures were recorded over the Mach number range of 0.80 to

0.95 in which the unsteady region moved rearward with the rearward movement of the shock-wave system.

Wing-Tip Accelerometer Measurements

The wing was constructed of steel to minimize the effects of flow dynamics on model dynamic response. Accordingly, the dynamic characteristics of the steel wing were investigated at M=0.80 to 0.95 using the accelerometer mounted in the wing tip, oriented in the vertical direction. The maximum calculated wing-tip deflection due to flow dynamics was about 0.08 mm as determined from the accelerometer measurements at M=0.80 TO 0.95.

Comparison of Measured and Computed Wing Pressures

Comparing large-scale and small-scale wing data with each other and with predictions can be difficult because of wall interference and model boundary-layer effects. The lift interference induced by the wind-tunnel wall can be different for each experiment. The effective thickness of the model boundary layer can increase the effective thickness of the wing, decambering the highly cambered aft wing section of supercritical airfoils and significantly affecting the predictions of lift and pitching moment. Therefore, it is interesting to compare the results from the two Wing C experiments with those from two wind tunnels with predictions. These comparisons supplement the comprehensive analysis of the small-scale data by Hinson and Burdges (ref. 3), using three configurations, Wings A, B, and C, high, medium, and low aspect-ratio wings.

The discussion considers the questions of the cause of the local-flow separation at the design test condition of M=0.85, the general success of the predictions at several Mach numbers, the correlation of the two experiments, and the wall effects in the two tunnels, including the effect of taping the suction slots to simulate solid walls.

Figures 15 present experimental chordwise pressure distributions for the maximum test Reynolds number of 10×10^6 at two Mach numbers: M = 0.82 for unseparated flow, and M = 0.85, the design Mach number. Other measured pressures are presented in appendix A.

Before discussing the pressure distributions it is useful to understand the development of the shock-wave pattern with increasing Mach number (this is shown in fig. 16, taken from the small-scale results (ref. 3)). Note that the design shock wave occurs first nearly parallel to the leading edge. With increasing Mach number, a second shock wave forms that is nearly perpendicular to the wing root. The two shock waves coalesce in the planform to form a lamda shape, which is a well known transonic shock-wave pattern. For higher aspect ratio wings, the two shock waves merge into a single shock that extends over the outboard panel (ref. 3).

Figures 17 to 19 show a comparison of the experimental and predicted chordwise-pressure distributions and the corresponding spanwise-load distributions at the design Mach number of 0.85. This is an especially interesting case, since it has been shown by oil-flow visualization that local-flow separation occurred near the wing tip of the large-scale model. Results from the two Wing C experiments are shown: the present large-scale wing test and the previous small-scale wing test of Lockheed Georgia, both for Re = 10×10^6 (based on mean aerodynamic chord). Predictions from two transonic wing codes are also shown.

FLO22 and TWING codes- Predictions from two 3-D, full-potential-flow transonic wing codes are included in the comparison of pressure distributions in figure 17. FLO22 is the nonconservative code used to design the wing (see Wing Design and figs. 3 to 7); TWING is a conservative code by Holst (refs. 11, 12, and 13) developed since the analysis by Hinson and Burdges (ref. 3). The TWING code has been shown to be successful for a wide range of wing shapes, from transport to fighter types (ref. 13). The code is included in figure 17 because it was used extensively in the conduct and present test and the analysis of the results because of its efficient algorithm and subsequent short computation time.

The predictions from FLO22 and TWING codes are generally in good agreement at the design Mach number of 0.85. At the midspan station TWING code shows a hump in the pressure distribution behind the design shock wave near the midchord, owing to the development of the second shock wave (fig. 16). It is typical of conservative codes that they capture the shock waves better than nonconservative codes. Consequently, the TWING results predict a slightly higher effective Mach number. This is seen further in the discussion of figures 20 and 21 which shows pressure measurements and TWING computations at several Mach numbers. At n=0.9 (fig. 17) the location of the shock wave is clearly more rearward for TWING code, and both methods show a stronger than desired shock wave (fig. 3).

Small-scale Wing C- The first wing-pressure tests of the Wing C configuration were conducted by Lockheed Georgia using the small-scale semispan model in their high Reynolds-number facility at $Re = 10 \times 10^6$ (refs. 1-3). Those results are discussed first.

In a creditable analysis Hinson and Burdges (ref. 3) compared the small-scalewing pressures from Wings A, B, and C with the predictions of several inviscid computer codes, including the design code FLO22 and a version of FLO22 modified to include corrections for boundary-layer displacement-thickness effect. (They did not include TWING code which did not exist at that time.) For comparisons with computations, the method of matching leading-edge pressures was used to select an experimental angle of attack of 5.9° , for which the experimental and predicted (FLO22 code, a = 5°) leading-edge pressures agree. This artifact cannot be used with all codes, but the FLO22 and TWING codes are noted for reasonable predictions of leading-edge pressures over a large range of sweep angles. The analysis assessed the tunnel wall lift- and blockage-interference effects by using measured floor and ceiling pressures, and the effective angle of attack as boundary conditions in the computations. It was found that the experimental wall pressures at the effective

angle of attack of 5.9° agreed closely with the computed free-air pressures at $a = 5^{\circ}$, thus giving more credence to the comparison of computation and experiment.

The small-scale Wing C pressures are shown in figure 17 for M=0.85 and $a=5.9^{\circ}$ (as selected in ref. 3). The pressures agree rather well with the computations; however, Hinson and Burdges concluded that the correlations were not quite as good for Wing C as for Wings A and B (ref. 3). The inclusion of viscous effects in the FLO22 computation made little difference in the correlation for Wing C; however, significant improvements were reported for Wings A and B. The fact that it was necessary to use a higher experimental angle of attack (5.9°) than the design angle (5°) indicates that the tunnel-wall porosity was more than adequate to compensate for the wall-lift-interference effect, which tends to increase the lift coefficient at a given angle of attack.

The span-load distribution in figure 19 shows that at a = 5.9° where the leading-edge pressures generally agree, the experimental loading is slightly higher across the span than that given by FLO22, and CN = 0.54, compared to 0.52 for FLO22.

Large-scale Wing C- For the present large-scale wing data, plotted in figures 17 and 18 for M = 0.85 and a = 5° and Re = 10×10^{6} , the frontal-area blockage of 1.3% chord is about the same as for the small-scale wing; however, the slotted-tunnel floor and ceiling pressures were not measured, so that the effect of lift interference could not be estimated as readily as for the small-scale wing (ref. 3). Fortunately, the lift interference must have been small, because the large-scale leading-edge pressures (figs. 17 and 18) just happen to agree with the predicted leading-edge pressures over the semispan for the design angle of attack of 5° and also with the small-scale leading-edge pressures at the selected angle of attack of 5.9° . Consequently, the large-scale pressures can be compared with the design pressures (a = 5°) without having to recompute the prediction at another angle of attack, and also, with the small-scale pressures without having to select another experimental angle of attack.

Inboard and midspan pressures. At the inboard and midspan stations (n = 0.1 and 0.5, figs. 17(a) and (b)), the upper-surface peak pressures decrease noticeably from the inboard to the mid section as predicted (fig. 4). The peak local Mach numbers near the leading edge, listed in figure 17, increase from 1.18 at n = 0.1 to as high as 1.56 at n = 0.5, for which the normal Mach number is 1.1 for a sweep angle of 45°. Thus, the design is successful in avoiding excessive local normal Mach numbers (higher than 1.2). The recompression occurs without a noticeable shock wave at the inboard section, in agreement with predictions, but at the midsection near x/c = 0.17 a mild shock wave forms that is oblique (supersonic local Mach number behind the shock wave). The shock wave is nearly parallel to the leading edge (according to the oil-flow photographs, figs. 9 to 11) and agrees approximately with the predicted location (figs. 4, 17, and 18).

The pressures near the trailing edge on both surfaces are more negative than predicted. This indicates a possible decambering effect, caused by the effect of the boundary-layer displacement thickness on the effective geometric thickness and

camber. This effect was smaller for the small-scale Wing C data, but it was strong for Wings A and B (ref. 3, discussed later in Other Existing Wing Data of Relevant Interest) at the Reynolds number of the tests (Re = 10×10^6).

The large-scale pressure distribution has a slight bump behind the shock wave, which is the beginning of the formation of the second shock wave, thus indicating a higher effective wind-tunnel Mach number than the small-scale data. This bump increases as the Mach number increases (figs. 16, 20, and 21, n = 0.5). The large-scale results agree more closely with the TWING code, which captures the second shock wave, than with the FLO22 code. The effective Mach number difference between the two codes would appear to be about 0.03, according to the experimental results in figure 20 and the computations in figure 21. There is about the same effective Mach number difference between the two experiments.

The question of the "correct" Mach number can be resolved with wall-boundary measurements. Wall measurements were not obtained with the large-scale wing; however, they were obtained with the small-scale wing (ref. 3), and these results can be used to deduce a "correct" Mach number. Actually, two measurements are required for a complete analysis: wall-pressure distributions and either wall normal-velocity or local-flow-angle distributions (ref. 14). It is also important that side-wall pressures and normal velocities be included in the global computations. For the small-scale wing tests, the upper- and lower-surface near-wall pressures were measured with pressure rails at three rows and one side wall row, but no vertical velocities were measured. To cover the latter effect, it was assumed that the integral of the flow angle distribution could be represented by the effective angle of attack, determined by the separate process of matching leading-edge pressures. Using this effective angle (in this case, $a = 5.9^{\circ}$) and the measured near-wall pressures, computations were made that indicated that the small-scale experimental Mach number was about 0.005 higher than the computed value (ref. 3). If this analysis is accepted as correct, the small-scale pressure distribution in figure 17(b) should be closest to wall-interference-free data. Hence, the FLO22 code was reported in reference 3. To be more nearly correct than the conservative code (FLO27 in ref. 3, comparable to TWING in fig. 17). Thus, the conservative codes slightly overestimate the strength of the shock waves, according to reference 3, which is well known from previous computational/experimental comparisons.

Outboard pressures. At the outboard station (n = 0.90, fig. 17(c)) a slightly higher effective Mach number is also evident in the large-scale data by the more rearward location of the shock wave than for the small-scale data. Except for shock-wave position, the predictions agree rather well with each other and with the experiment (considering that this station is close to the wing tip). Both predictions and experiment show a stronger shock than desired (fig. 3) because of a supersonic expansion behind the leading edge. Near the leading edge the local Mach numbers are as high as 1.54, about the same as at the midspan station n = 0.5, but occurring farther rearward at $x/c \sim 0.35$. The normal Mach number for a sweep angle of 45° is 1.09; however, the effective sweep at x/c = 0.35 could be less, say 40° or less, raising the local effective normal Mach number beyond 1.2 for local separation. The average shock-separation-front angle appears to be less than 40°. The

shock-wave/boundary-layer interaction causes the three-dimensional flow separation, indicated by the oil-flow results (fig. 10(a)). The pressure coefficient at the trailing edge is -0.04, which indicates that the flow separation exists to the trailing edge. It is interesting that the pair of vortices rotate in an opposite sense to the tip vortices of the lifting wing (like a wing element at negative angle of attack); hence, the separated cell causes a local lift decrement, as expected.

Span load distribution- The span-load distribution in figure 19 for M=0.85 shows that at $a=5^{\circ}$, where the leading-edge pressures generally agree, the experimental loading is higher across the span than that given by FLO22 code, and CN=0.54, compared to 0.52 for FLO22 code. Since the large-scale wing is at the design angle of attack, the slightly higher loading indicates a small wall-interference effect. A slightly higher loading can be seen in the experimental pressure distributions (fig. 17), possibly owing to a higher effective Mach number according to the evidence given in the previous discussion.

Effect of Reynolds number- Pressure distributions and oil-flow patterns were obtained at other Reynolds numbers from 3.4×10^6 to 10×10^6 at M = 0.85. The results showed no significant effect of Reynolds number.

Effect of Mach number- Figure 20 shows the effect of Mach number from M=0.80 to 0.95 on the experimental pressure distributions at the midsemispan station, n=0.50. The leading-edge pressures decrease as expected and the first shock wave moves slightly rearward; however, the most noticeable effect is the appearance, growth, and size of the rearward movement of the second shock wave. These effects are well predicted by the TWING code, shown in figure 21, which demonstrates the great utility, because of the short run times, of this code when studying many off-design conditions. The second shock wave appears in the FLO22 code at a higher Mach number (see fig. 23(f) for M=0.90).

Predicted effects of angle of attack- The usefulness of the TWING code in analyzing the possible effects of angle of attack on the experimental data dan be seen in figure 22 for n=0.50 and $a=1^{\circ}$ to 6° . These computations, available before the test, were used to consider the possible reduction in angle of attack to reduce the strength of the shock wave. A reduction of two or three degrees would be required, consequently the test angle of 5° was retained.

Off-design pressure distributions- Carpet plots of predicted wing pressures from FLO22 code are presented in figure 23 for $M=0.25,\ 0.50,\ 0.70,\ 0.82,$ and 0.90 for $a=5^\circ$; also included is $M=0.85,\ a=7^\circ$ (which is used later in the discussion of the effect of wall suction slots). At M=0.82, the pressure distributions appear to achieve the design goals of a mild shock wave and a mild pressure recovery with no indication of any possible problems of flow separation. Stable solutions were obtained at all of these conditions for which strong shock wave appear in the solutions, even at the highest Mach number of 0.90 and the highest angle of attack of 7° .

Figure 24 presents a comparison between the predicted pressures by FLO22 code and the experimental pressures at Mach numbers of 0.25, 0.50, and 0.82. The results

show excellent agreement at M=0.25 and 0.50 and good agreement at M=0.82. Note that, again, the leading edge pressures just happen to agree with the computations so that no adjustment in angle of attack was required in the computations. At M=0.82 the experimental pressure distributions achieved the design goals (hoped for at M=0.85) of a mild shock wave and a mild pressure recovery with no indication of any possible problems of flow separation.

Effect of wall suction slots- Figure 25 shows a comparison of experimental pressure distributions with floor and ceiling suction slots taped closed to simulate solid walls with those for slots open, with a porosity of 6% of the floor and ceiling area, for M = 0.82 and Re = 6.8 M. A large increase in lift blockage can be seen, increasing the normal-force coefficient from 0.52 to 0.65, which would correspond to an effective angle of attack of about 7° (CN = 0.62) according to the Lockheed small-scale tests (ref. 1). In addition, the position of the shock wave at the midspan station, n = 0.5, is about x/c = 0.65 with slots taped, which indicates that the effective Mach number is about 0.87, according to figure 20.

In order to further investigate these observations, a computation was made with FLO22 code for a = 7° and M = 0.85 (to compare with a = 5° at M = 0.85). The carpet plot is presented in figure 23(e) and the results are compared with the experiment in figure 26. (For comparison, the carpet plot for M = 0.85 and a = 5° is in figure 4.) The computations for free air at M = 0.85 and a = 7° are similar to the experimental results with slots taped for M = 0.82 and a = 5°. The lift coefficient is about the same (CL = 0.65) and a second shock wave is prominent; however, the computed shock-wave position is $x/c \approx 0.45$ compared with the measured position of about 0.65. The more rearward position of the measured shock wave indicates that the effective Mach number with slots taped was higher than the computed Mach number of 0.85, as concluded earlier. Thus, a strong lift blockage ($\Delta a \sim 2^{\circ}$) and drag (Mach number) blockage ($\Delta M \sim 0.5$) are indicated by the data with suction slots taped. Some flow separation is indicated at the trailing edge by the negative pressure coefficients.

It was intended to compare these experimental results to predictions by the FLO29 computer code, a 3-D, full-potential, conservative, transonic wing code developed for computing the flow for a wing in a wing tunnel. However, experience at Ames (ref. 15) with various versions of the FLO29 code have shown anomalies which indicate that the code is not performing adequately at this time for the in-tunnel case.

Retrospection of Wing C Design and the Problem of Local-Flow Separation

In retrospect, the potential for the occurrence of the shock/boundary-layer flow separation can be perceived by reexamining the predicted pressure distributions in figures 4(a) and (b). Recall that it was pointed out in the discussion of figure 17 that at n=0.90 a stronger-than-desired shock wave was observed in both the predicted and the measured pressures. Now note in figure 4 that the desired design pressure distribution occurs outboard of n=0.90 at about n=0.93, and

that inboard of n = 0.93 a strong shock wave is predicted to occur at about n = 0.63. In addition, at n = 0.78, 0.83, and 0.88 the predicted pressures show a short supersonic expansion behind the leading edge that strengthens the shock wave and increases the possibility of separating the boundary layer. This is also seen in the measured pressure distributions at n = 0.90. Thus, it is possible that the flow separation could have been avoided in the design by eliminating this local supersonic expansion. On the other hand, this shock-wave/boundary-layer separation might still occur at Mach numbers above the design condition.

In a private discussion of this separation problem. Hicks (Ames Research Center) suggested that additional wing twist and camber might have achieved the desired results. However, it might also have been necessary to eliminate the requirement of linear lofting between the root and tip stations, imposed on the design to simplify the machining of Wing C. Thus, more than two design control stations should probably have been used for good transonic wing design. Further, it has been noted that when FLO22 is used in transonic wing design, it is best to design for shockless flow at some Mach-number increment higher than the desired design value to avoid shock-induced separation. The present Wing C results indicate that this Mach number increment should be about 0.03, since the flow is unseparated at M = 0.82, but separated at the design Mach number of 0.85. In addition, it would be useful to supplement the FLO22 prediction with a computation from a conservative code like TWING which captures the shock waves more clearly, but with some local effects on the pressures behind the shock. The time-efficient TWING code could then be used to compute many off-design conditions.

Other Existing Wing Data of Relevant Interest

The results from six other wing tests that are relevant to the results for Wing C are reviewed (figs. 1 and 27). These other results contribute to the present analysis in two ways: first, the conclusions from the computational/experimental analysis of the Wing C pressures cannot be generalized without including the investigation of other wing configurations, so that the analysis of small-scale Wings A and B (ref. 3) is a valuable contribution to the investigation and is reviewed below. Second, the lack of three-dimensional surface flow in the present Wing C oil-flow patterns at the design condition for unseparated flow introduces the question of what wing configurations might have significant 3-D surface flow at the design condition for unseparated flow. Evidently, a highly 3-D low-aspect-ratio wing configuration with large leading-edge sweep angle does not necessarily have a significant 3-D boundary-layer flow at the design condition. The investigations of the first five wings are cited to support this allegation, since the first five wings have the common characteristic that they had small 3-D surface flow at design conditions. The last wing (the transport wing) experienced strong 3-D boundarylayer flow and so those results are reviewed to determine what configuration differences caused the 3-D boundary layer.

Lockheed Georgia Wings A and B- As part of the comprehensive cooperative investigation by Lockheed Georgia, Hinson and Burdges (refs. 1-3 and fig. 1) designed and

tested two other small-scale wing models, designated A and B. In reference 3, the small-scale wing results were compared with the predictions of several inviscid computer codes. They reported that the correlations with FLO22 code were surprisingly good for Wings A and B. It was especially noteworthy that when 2-D viscous effects were included in the FLO22 computation, the prominent decambering effect owing to the boundary-layer displacement thickness effect on the aft pressure distributions were correctly predicted. The predicted decambering effect resulted in a significant reduction in predicted lift coefficient for Wings A and B. The final lift coefficients agreed with the predicted values for Wings A and B, indicating that the wind-tunnel wall effects were eliminated by the perforated ceiling and floor suction. This was not the case for Wing C results, for which the final lift coefficients were 0.54 (measured) and 0.52 (FLO22, fig. 17). It is interesting that the effects of viscosity on the pressure distribution could be predicted so well for Wings A and B using the 2-D boundary-layer code.

Streett (ref. 16) investigated further the decambering effect of the boundary layer for Wing A using an existing 3-D compressible, integral boundary-layer method and concluded that a 3-D code would be necessary only near the wing tip for Wing A. No oil-flow results are available for Wings A and B. They were designed for weak shock waves and mild pressure recoveries, similar to Wing C, whose oil-flow results show almost 2-D surface-flow patterns for unseparated flow conditions.

NASA Dryden F-8 research airplane- A supercritical wing, similar in planform to Wing A, was flight tested on an F-8 research airplane at NASA Dryden Flight Research Center (fig. 27). Montoya and Banner show (fig. 19, ref. 17) that the measured boundary-layer flow angles were nearly zero at the trailing edge at angles of attack less than about 5° at Mach numbers up to about 0.90, which is similar to the results for Wing C. Oil-flow photographs from a wind tunnel model show nearly 2-D surface flow over most of the wing at M = 0.90 and $A = 3.5^{\circ}$ (fig. 18, ref. 17).

FAA, Sweden, Saab 32 Lansen research airplane- Flygtekniska Forsoksanstalten (FAA), Sweden, made surface-pressure and boundary-layer measurements over the outer wing panel of a Saab 32 Lansen with an NACA 64A010 wing section, both in flight and in a wind tunnel. Bertelrud (ref. 18) reported that the curvature of the wall streamlines, deduced from oil-flow visualizations, was small over the main part of the wing.

NASA Ames Swept NACA 0012 semispan wing- Reference 15 describes an experimental investigation of the turbulent, subcritical, and supercritical flow over a swept, NACA 0012 semispan wing (fig. 27) in a solid-wall, high-Reynolds-number wind tunnel (Ames). Surface-pressure and laser-velocimeter flow-field measurements are presented and the results are compared with two inviscid wing codes. Although this wing was relatively thick and was not computer optimized, the oil-flow photographs show that the surface-flow pattern was not very three dimensional when the flow was unseparated. At M = 0.82 and 0.83 flow separation occurred in the outboard region of the upper surface, similar in appearance to that of Wing C. However, the separation occurs here because of the thick wing section (12% chord) which is less supportive of supercritical flow than the Wing-C sections and induces a strong shock

wave. Also, the model had no wing twist to alleviate the spanwise increase in effective angle of attack.

NASA Ames/McDonnell-Douglas transport wing- A cooperative experimental test program was conducted by Spaid of McDonnell Douglas (ref. 6) in the Ames 14-Foot Transonic Wind Tunnel using a transport wing configuration (fig. 27). Unlike the preceding models, this model was designed for a strong pressure-recovery gradient over the rear of the wing section to increase the aft wing volume. The design problem was to avoid separation from the strong adverse pressure gradient. Predicted inviscid wing pressures and surface streamlines by FLO22 code are presented in figure 28 for the experimental conditions of M = 0.825 and $a = 4^{\circ}$. The predicted pressures show the strong design shock waves and pressure-recovery gradients. The predicted inviscid, surface, streamlines are not very three dimensional; however, the streamlines have more curvature for the transport wing than for Wing C (fig. 5(b)).

A mini-tuft flow-visualization photograph from reference 5 is reproduced in figure 29, showing that the boundary-layer flow on the surface turned outboard over the last 15% chord. Flow angles at the trailing edge were measured as high as 30° outboard (reproduced in fig. 30). From these results it is evident that in some wing designs, aerodynamic optimization is relaxed to allow the boundary layer to approach separation, which induces significant 3-D boundary-layer flows. For these wings, test results should be analyzed to determine if the methods and accuracy of a boundary-layer are required.

CONCLUSIONS

The conclusions of the analysis of surface-pressure and oil-flow photographs from wind-tunnel tests of a large-scale semispan model of Ames/Lockheed Wing C are presented below. Wing C is a generic, transonic, supercritical, low-aspect-ratio configuration, designed for a Mach number of 0.85 and an angle of attack of 5°, using a 3-D transonic, potential-flow code (FLO22) and an optimization routine. Pressures were measured at the design angle of attack over a Mach number range from 0.25 to 0.96 and a Reynolds number range of 3.4×10^6 to 10×10^6 with both the tunnel floor and ceiling suction slots open for most of the tests, and taped closed for some tests to simulate solid walls. A brief comparison was made with pressures measured in a small-scale model tested at the same Reynolds number and with predictions from two transonic wing codes: design code FLO22 (nonconservative) and TWING code (conservative).

1. At the design Mach number and angle of attack of 0.85 and 5°, respectively, the oil-flow patterns showed that local-flow separation occurred in the outer 30% of the semispan, caused by a strong, local, shock-wave/boundary-layer interaction that was not a tip-vortex effect. The flow separation increased as the Mach number was increased to 0.95, but disappeared when the Mach number was reduced to 0.82. Though

undesired, this separation provides interesting data for calculations of viscous wing flows with shock-wave/boundary-layer separation.

- 2. At Mach 0.82 the flow was unseparated and the oil-flow pattern showed that the surface-flow pattern was not very three dimensional. The surface oil-streak angles were less than 10°, except near the leading edge. At the trailing edge, the flow angles were 8° outboard on the surface and about 5° inboard, outside of the boundary layer, according to inviscid computations, so that most of the boundary-layer flow is nearly two dimensional.
- 3. At Mach 0.82 the main wing shock wave was found to be unsteady at a low, irregular frequency of about 3 Hz, inducing unsteady pressures to the trailing edge; however, the model was inflexible and the model dynamic oscillations were negligible. The unsteadiness extended over a Mach number range of 0.80 to 0.95.
- 4. Comparing the large-scale and small-scale data with each other and with predictions are complicated by wall interference and model boundary-layer effects. For example, the normal-force coefficients at the design Mach number and angle of attack of 0.85 and 5° were 0.48 and 0.54 for the small-scale and large-scale models, compared with 0.52 for both the FLO22 and TWING codes. Effective Mach number differences between the two models and the predictions could be as large as 0.03, according to the results. The small-scale study of Hinson and Burdges showed that a more definitive determination of the effective Mach could be made by using tunnel-wall measurements in the computations.
- 5. Matching leading-edge pressures (used by Hinson and Burdges in their analysis) appears to be one satisfactory method of contending with the difficulty of selecting an experimental angle of attack to correlate the experimental and predicted pressure distributions. Using this method, predictions by design code FLO22 (nonconservative) generally agree well with the experiments to Mach numbers as low as 0.25, except for the details of the variations in shock position and aft loading. Comparisons with predictions by TWING code (conservative) at Mach 0.85 show generally good agreement with FLO22 code and the experiments, except that TWING code captures the second shock wave more than FLO22 code.
- 6. Wall interference effect was effectively demonstrated when the floor and ceiling suction slots were taped to simulate solid walls at Mach 0.82. The normal force coefficient increased tremendously from 0.52 to 0.65 (equivalent to about 7° in incidence) and the effective Mach number increase to about 0.87. It was intended to compare the pressures, measured with the suction slots taped, with predictions by the FLO29 computer code, a 3-D, full-potential, conservative, transonic wing code developed for computing the flow for a wing in a wind tunnel. However, experience at Ames has shown anomalies that indicate that the code does not adequately predict the in-tunnel case.
- 7. In retrospect, the flow separation that existed at the design conditions might have been avoided by further iteration in the design because the inviscid pressure distributions indicate a slightly stronger shock wave than that desired in the region of the measured separation. Not surprisingly, it appears that more than

two defining stations are needed to design an efficient transonic wing. When FLO22 is used in transonic wing design, one should design for shockless flow at a higher Mach number than the desired design value (an increment of about 0.03, according to the present oil-flow results).

- 8. Evidence from this study and from other cited wing studies indicates that wings that are optimized for mild shock waves and mild pressure-recover gradients generally have small 3-D boundary-layer flow (flow angles less than 10°) at design conditions for unseparated flwo. Further, for these wings, 2-D boundary-layer methods appear to be sufficient to predict the effects of boundary-layer thickness on the pressure distributions.
- 9. Evidence from another cited wing study indicates that in some wing designs optimization is relaxed to allow the boundary layer to approach separation, which induces significant 3-D boundary-layer flows near the trailing edge.

RECOMMENDATIONS

Based on the results of the Wing-C test program the following recommendations are offered.

- 1. That a transonic code for a wing in a tunnel with solid walls be developed to compare with the experimental pressure distributions with wall suction slots taped closed to simulate solid walls. A transonic, small-disturbance code exists for this problem; also, subsonic panel codes can treat the wing-tunnel case.
- 2. That the experimental pressure distributions at Mach numbers of 0.85 and above with local flow separation be used for comparison with Euler and Navier-Stokes codes.
- 3. That the cited 3-D boundary-layer results for the transport wing should be analyzed to determine (a) if three-dimensional boundary-layer methods for the case of unseparated flow are required, and (b) their accuracy.

APPENDIX

TABULATIONS AND PLOTS OF PRESSURE DATA

Microfiche records are enclosed on the inside back cover for the sets of tabulated data (1 fiche) and plots of chordwise pressure distributions (2 fiches) for the test conditions listed in table 3. A sample copy of one of the tabulations is shown in table 2.

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TABLE 1.- SECTION ORDINATES OF WING C AT ROOT AND TIP

N	X/C		Tip	R	oot
IN	A/ C	z/c _U	z/c _L	z/c _U	z/c _L
1	0.00000	0.00000	0.000000	0.00000	0.00000
2	.00241	.00730	006025	.00967	00503
3	.00961	.01542	009709	.01784	00941
4	.02153	.02261	012482	.02584	01244
5	.03806	.02830	015382	.03351	01480
6	.05904	.03285	018439	.04109	01696
7	.08427	.03653	020903	.04854	01863
8	.11349	.03928	022924	.05581	01995
9	. 14645	.04115	024471	.06290	02089
10	.18280	.04221	025486	.06965	02130
11	.22221	.04261	026195	.07586	02142
12	.26430	.04253	026280	.08108	02101
13	.30866	.04202	025949	.08493	02023
14	.35486	.04109	025082	.08718	01884
15	.40245	.03982	023888	.08770	01704
16	.45099	.03812	022217	.08648	01462
17	.50000	.03613	020079	.08368	01172
18	.54901	.03384	017094	.07951	00798
19	.59755	.03135	013470	.07427	00362
20	.64514	.02864	009348	.06818	.00112
21	.69134	.02584	005664	.06142	.00518
22	.73570	.02298	002667	.05418	.00825
23	.77779	.02006	000695	.04682	.01003
24	.81720	.01710	.000481	.03956	.01050
25	.85355	.01415	.000802	.03256	.00972
26	.88651	.01124	.000588	.02605	.00807
27	.91573	.00855	.000108	.02016	.00589
28	.94096	.00618	000269	.01491	.00362
29	.96194	.00422	000561	.01049	.00142
30	.97847	.00272	000598	.00701	00028
31	.99039	.00172	000501	.00452	00141
32	.99759	.00110	000698	.00315	00233
33	1.00000	.00082	000821	.00270	00270
L		<u> </u>	l	l	

TABLE 2.- SAMPLE TABULATION OF DATA FROM APPENDIX

165:3 165:3 165:3 165:3 165:3 10	11	CCEFFI CALS CALS CALS 2-0.023 7-0.027 7-0.027 7-0.027 7-0.027 7-0.027 7-0.027 7-0.027 7-0.015	ALPHA CONF 4 5.0C 17 CNU 0.440 CIENTS CWS XCPUS 7-0.0559 30.57 7-0.0559 30.57 9-0.0546 30.34 5-0.0615 33.39 NTS	CNL 0.0083 0.0083 XCPLS X 44.04 3 51.82 3 54.94 3 56.74 3	CN CMU CMI 0.523-0.0206-0.0131-0 LPS CMC/ CMC/ 8.67 0.631 0.141 5.96 0.639-0.002 14.34 0.598-0.107 0 0 0 0 0 0	WTNG CI CM CM CM 2Y/B X/C 0 0.03 0.005 0.001 0.001 0.002		PU X 69 40 PPER -296 -357 -508 -970	XCPL XCP 40.91 31.46 iR SURFACE C 36 0.500 57 0.273 -0.144 -0.362 8 -0.619 77 -1.113	70° 70° 70° 70° 70° 70° 70° 70° 70° 70°	TAU CF 0.600 0.00 ENTS 0.894 0.894 0.879 -0.779 -0.779
CNUS CNLS CNUS CNLS C.343 0.097 0.437 0.096 0.506 0.093 0.550 0.022 0.550 0.022 0.550 0.022 0.550 0.022 0.543 0.543 0.550 0.022 0.543 0.027 0.099 0.072 0.151 0.172 0.114 0.077 0.096 0.043 0.059 0.016	16 SECTIC NS CAUS A4C-0.04 44C-0.04 524-0.03 5524-0.03 5524-0.04 5524-0.04 5524-0.04 572-0.04 572-0.04 572-0.04 6.50 6.329 6.329	TR 0 9.1 455.4 N CCEFFIC S CMLS 18-C.0164 42-0.023 82-0.027 62-0.015 67-0.027 62-0.015	X W W W W W	CNL D 0.083 XCPt S X 44.04 3 51.82 3 54.94 3 56.74 3	CMU CMI 1,0206-0,0131- NC/ CMC/ 631 0.141 639-0,002 598-0,107 487-0,137	27/8 27/8 27/8 X/C 0.003 0.004 0.01 0.02	0.2245 0.2245 0.2245 0.449 0.449 -0.275 -0.574 -0.6644	PU X 68 40 PPER 296 357 357 568	SURF 0.01 0.01 0.01 0.01		00 00 0. 894 237 237 779 816
CNUS CNLS 0.437 0.096 0.437 0.096 0.506 0.093 0.550 0.022 0.550 0.022 WING LOWER 0.099 0.296 0.151 0.172 0.151 0.077 0.096 0.043 0.099 0.017	10. SECTIC 14. SECTIC 14. 45. CMU 14. 45. CMU 15. 24. CMU 15. 24. CMU 15. 24. CMU 16. 26. CMU 16. CMU 16. CMU 16. CMU 16. CMU 16. CMU 1	N CCEFFICALS N CCEFFICALS N CCEFFICALS N C C N C S S S S S S S S S S S S S S S		XCPL S XLPS 44.04 38.67 51.82 35.96 54.94 34.34 56.74 33.81 96.53 35.78	.NC/ CMC/ .631 0 .141 .639-0.002 .598-0.107 .487-0.137	2Y/8 X/C 0.003 0.003 0.006 0.01	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.357 0.357 0.357 -C.508 -C.870	ν		0.894 0.894 0.237 -0.554 -0.779 -0.859
0.556 C.093 0.556 C.093 0.556 C.022 0.557 C.022 0.557 C.022 0.557 C.022 0.543 0.543 0.151 0.172 0.114 0.077 0.059 0.016	524-0.03 524-0.03 619-0.02 572-0.04 572-0.04 6.50 6.543 6.329	18-C.016 42-0.023 82-0.025 87-0.025 62-0.015 0.697		44.04 38.67 51.82 35.96 54.94 34.34 56.74 33.81 96.53 35.78	631 0.141 639-0.002 598-0.107 487-0.137	X7C 0 0 003 0 0003 0 001 0 0 02 0 03	!!!	6 11			0.237 -0.554 -0.779 -0.859
0.550 0.092 0.550 0.092 0.099 0.296 0.543 0.543 0.114 0.077 0.059 0.012 0.059 0.012 0.059 0.012	515-0-0-6 515-0-0-6 518-0-0-6 518-6-6 6-5-6 6-5-6 6-3-6 6-3-7-8 6-3-7-8	62-0-025 62-0-0155 CEFFICIE 0-697		56.74 33.81 96.53 35.78	487-0-137 .328-0-106	0.006 0.01 0.02 0.03			-0.3£2 -0.619 -0.949	ļ l.	-0.554 -0.779 -0.859 -0.816
C.225 0.214 WING LOWER WING LOWER 0.543 0.543 0.543 0.543 0.151 0.172 0.114 0.077 0.059 0.016 0.059 0.016	0.542 0.543 0.329 0.329 0.378	CEFFICIE 0.697 0.543				0.02	-0.574		-0.949		-0.779 -0.859 -0.816
MING LOWER 3 0.099 0.296 0.543 0.542 0.151 0.172 0.114 0.077 0.059 0.015 0.059 0.015	500 500 543 404 329 378	EFFICIE 0.697 0.543	0.89			0.03	-0.657	196.0-	-1.13	-1.05 -1.05	-0.816
C.225 0.214 0.151 0.172 0.114 0.073 0.059 0.016	0.543 0.543 0.329 0.378	0.697	83				10.01		1 1 2 5		
C.225 0.214 C.225 0.214 0.151 0.172 0.114 0.077 C.096 0.043 0.059 0.010	0.543 C.404 C.329	. 54				0.04	-0.642	-1.152	-1.239	-	-1.010
C.225 0.214 0.151 0.122 0.114 0.077 C.096 0.043 0.059 0.010	C.404 C.329 C.278		0.543			0.05	-0.6¢E		-1.264	7	-1.018
C.225 0.214 0.151 0.172 0.114 0.077 C.096 0.043 0.059 0.010	0.329					0.08	785.D-	-1.093	-1.234	-1.197	-0.586
C.225 0.214 0.151 0.172 0.114 0.077 C.096 0.043 0.059 0.010	C. 278					125			176-1-	-1-224	-1.001
C.225 0.214 0.151 0.122 0.114 0.077 C.096 0.043 0.059 0.01C	776 7					0.15	'			-	-1.006
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.15 0.114 0.077 .20 0.096 0.043 .30 0.059 0.010	C.105	500.	0.020			0.20	-0.500	-0.565	-0.762	-1.198	-1.044
30 0.059 0.015 40 0.027 -0.015	C.068	0.037	-C.024 -0.054			0.25			·	-0.720	-1.072
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(TO 0		0.000	-0.102			0.35	-0.433			-0.643	-0.810
50 -0-0-0-0s	-0.010 -0.010	028	-0.087			0.40	-0.435		`	-0.621	-0.722
55	**					0.45	-0.417			-0-584 -0-684	10.5%
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0.75 0.146 0.172	0.186	0.181	C•145			0.0	10.255			-0.265	-0.277
191 0 08	0.204	0 100	2.0			.	-0.245	'		-0.213	-0.256
.85 C.15C	61.0	0.1.0	0.170			0.80	-0.195			-0.161	-0.219
0.90 0.129 0.150	0.172	0.125	C_085			0.85	-0-147			-0.114	-0.169
000 000	3 6	647	-0.017		- Company	05.0	-0.096	0-	ľ	-0.056	0.130
60.0	,		,			96.0	•	ç	00.0-	0.002	-0.082
						1.00	0.015	0.039	0.039	0.047	-0.017

TABLE 2.- CONCLUDED.

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C. 1944 A	Р									-0.276-0.263-0.214-0.147	
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0.413 0.049	0	0		•	-0.404			0.286		-0.387-0.398-0.349-9.236-0.155-0.035-0.044-	-0.013
C.437 0.0440 -0.392 -0.317 4.75 0.101 -0.384-0.375-0.30-0.00-0.391 0.485 0.037 -0.391 -0.299 3.75 0.069 -0.234-0.147-0.021-0.016 0.485 0.037 -0.390 -0.390 -0.299 0.75 0.069 -0.235-0.13-0.029-0.039 0.553 0.031 -0.369 -0.303 -0.292 0.75 0.064 -0.234-0.147-0.021 -0.234-0.143-0.029-0.006 0.554 0.051 -0.324 -0.333 -0.225-0.006 0.75 0.042 -0.234-0.143-0.079-0.007 0.055 0.054 0.234-0.143-0.079-0.007 0.055 0.054 0.134 0.055 0.054 0.134 0.055 0.054 0.134 0.055 0.054 0.107 0.117 0.077 0.077 0.057 0.054 0.107 0.117 0.077 0.057 0.057 0.056 0.054 0.107 0.117 0.077 0.057 0.107 0.017 0.017 0.077 0.057 0.057 0.057 0.107 0.017 0.077 0.057 0.077 0.059 0.057 0.077 0.059 0.057 0.077 0.059 0.057 0.077 0.059 0.057 0.077 0.077 0.057 0.077 0.077 0.056 0.055 0.057 0.077 0.077 0.057 0.077 0.077 0.057 0.077 0.077 0.057 0.077 0.077 0.057 0.077 0.077 0.057 0.077 0.077 0.057 0.077 0.077 0.057 0.077 0.077 0.057	0	0			-0.385	·6-	.362	-0.311		-0.235-0.155-0.046-0.038-	-0.0-
0.461 0.050 -0.381 -0.310 2.75 0.089 -0.235-0.139-0.029-0.015-0.015-0.015 0.553 0.031 -0.310 2.75 0.089 -0.235-0.139-0.029-0.007-0	ပံ	P			-0.392			-0.317		-0.388-0.385-C.324	
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0.914	ပံ			-C.104	Í	0.112	-0-	134-0-127			
0.938	Ċ		.103	.07	1	0.101	-0-	105-0-107			
0.961	0		·10C-C.	-C.049	Ī	0.075	-0-	088-0-094			
0.985	C		C.07C-C.0C1	-0.042	ĩ	0.048	-0-	075-0-096			
1.009	O		C.054 C.C25	-0.C02	ĺ	0.021	0-	690-0-650			
1,069 C.027 C.005 C.021 -0.006 1,002 C.03E C.01E C.012 1,116 C.03F C.023 C.012	Г					0.015	-0-	040-0-149			
5 1.092 C.038 C.C18 O	_			O	Ĩ	9	10-	042-0-066			
5 1-116 0.032 0.023 0	5 1			0.01							
			C-038 0.02	P							

TABLE 3.- TEST CONDITIONS FOR MEASURED WING AND WALL PRESSURES

Reynolds number	Mach number	Run Number (listing)
3.4×10 ⁶ 3.4×10 ⁶ 4.6×10 ⁶ 4.6×10 ⁶ 5.7×10 ⁶ 6.8×10 ⁶	0.25 .82 .82 .86 .82 .50 .60 .70 .74 .78 .80	206 183 182 184 181, 205 204 203 202 201 200 197 196
7.9×10 ⁶ 9.1×10 ⁶ 9.1×10 ⁶ 10×10 ⁶	.82 .83 .84 .85 .86 .88 .90 .92 .94 .95 .96 .82 .86 .80 .81 .82 .83 .84 .85 .86	165, 195 194 193 192, 199 191, 198 190 189 188 187 186 185 180 179 178 174 173 172 171 170 169 168 167 166

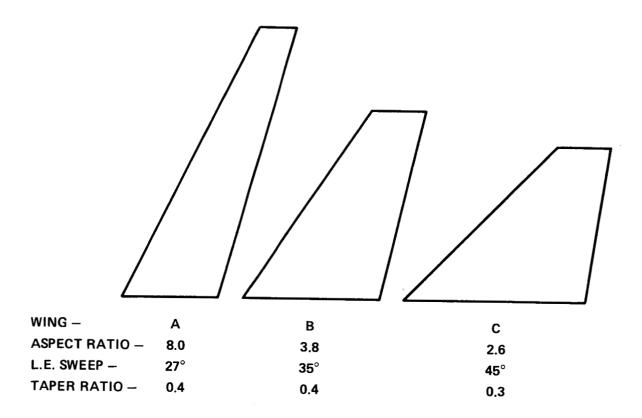


Figure 1.- Sketch of small-scale wing models for Lockheed-Georgia tests in their high Reynolds number facility.

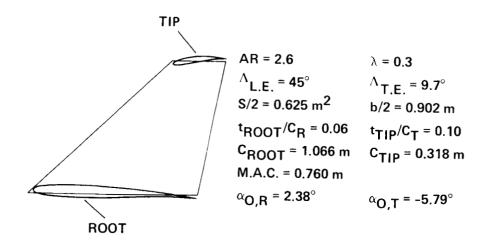


Figure 2.- Wing C geometry.

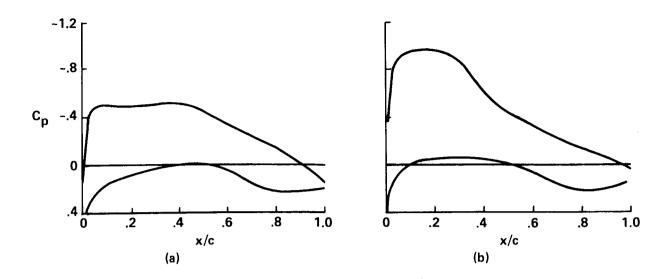


Figure 3.- Specified design chordwise-pressure distributions; M = 0.85, $a = 5^{\circ}$.

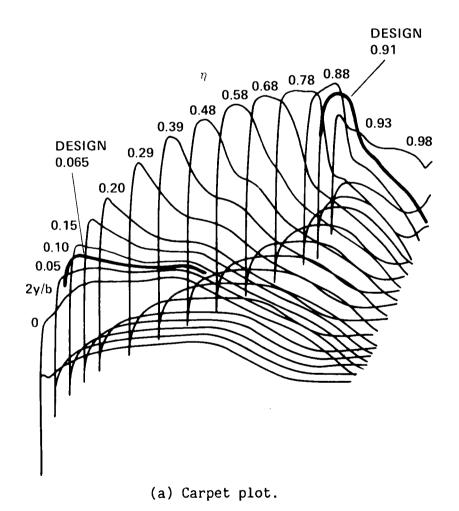
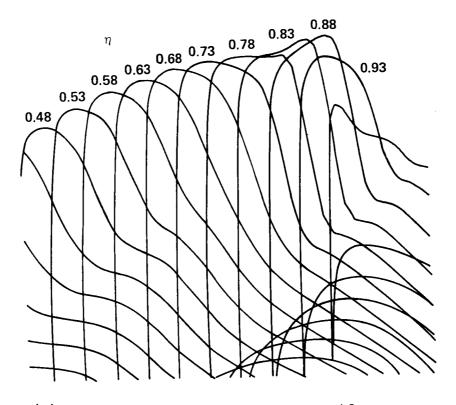


Figure 4.- Predicted inviscid wing chordwise pressure distributions by FLO22 code at design conditions; M = 0.85, $a = 5^{\circ}$.



(b) Selected distributions for n = 0.48 to 0.93.

Figure 4.- Concluded.

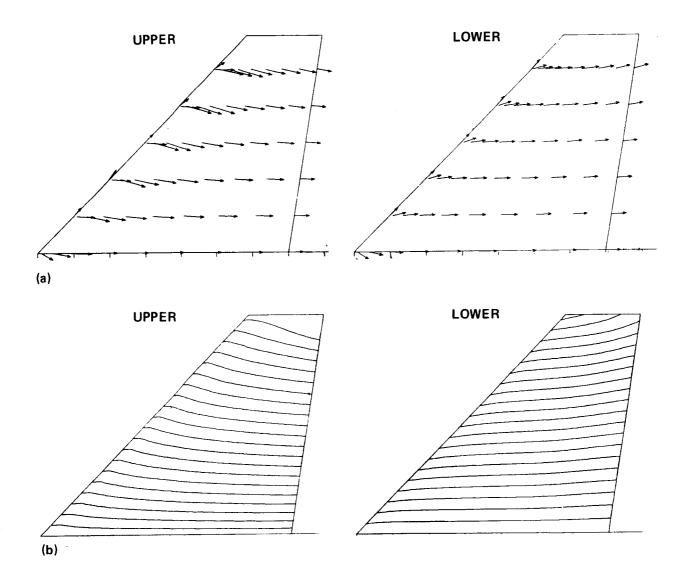


Figure 5.- Predicted inviscid surface-flow characteristics by FLO22 code; M = 0.85, $a = 5^{\circ}$. (a) Velocity vectors. (b) Streamlines.

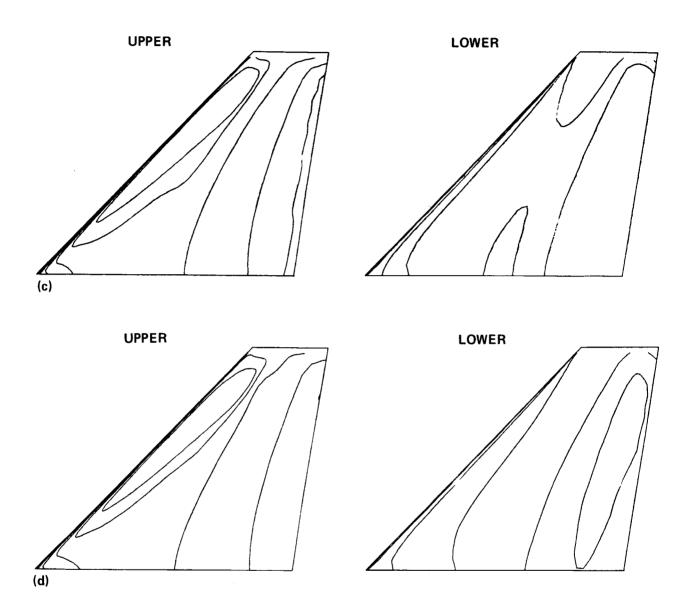


Figure 5.- Concluded. (c) Pressure contours. (d) Mach number contours.

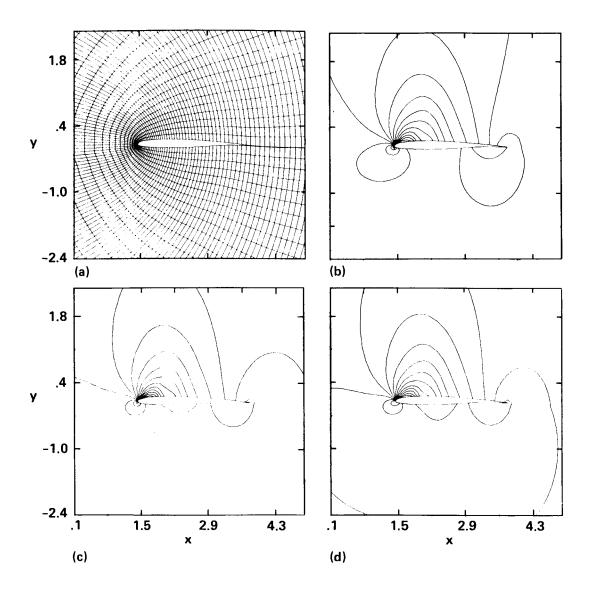


Figure 6.- Predicted inviscid flow characteristics in a vertical, chordwise plane by FLO22 code; M = 0.85, a = 5°, n = 0.488. (a) Grid. (b) Pressure contours. (c) Mach number contours. (d) Density contours.

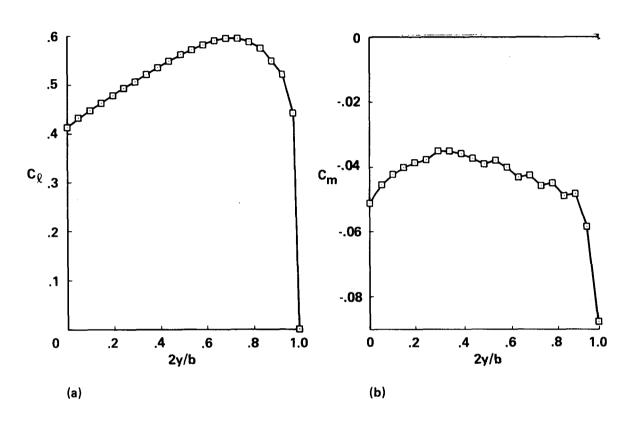
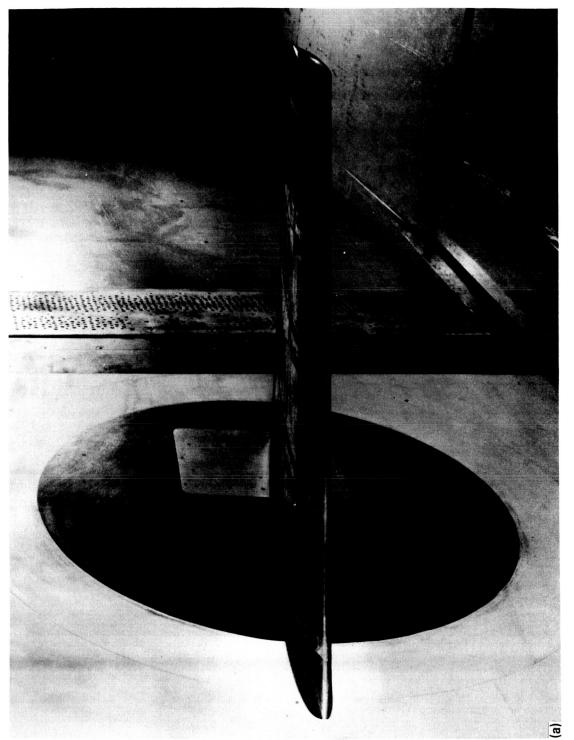


Figure 7.- Predicted spanwise loading and moments from FLO22 code; M=0.85, $a=5^{\circ}$. (a) Section load coefficient. (b) Section quarter-chord pitching-moment coefficient.



(a) Front view.

Figure 8.- Photographs of 0.9 m semispan model of Wing C mounted on wall of Ames 6- by 6-Foot Transonic Wind Tunnel.

(b) Rear view.

Figure 8.- Continued.



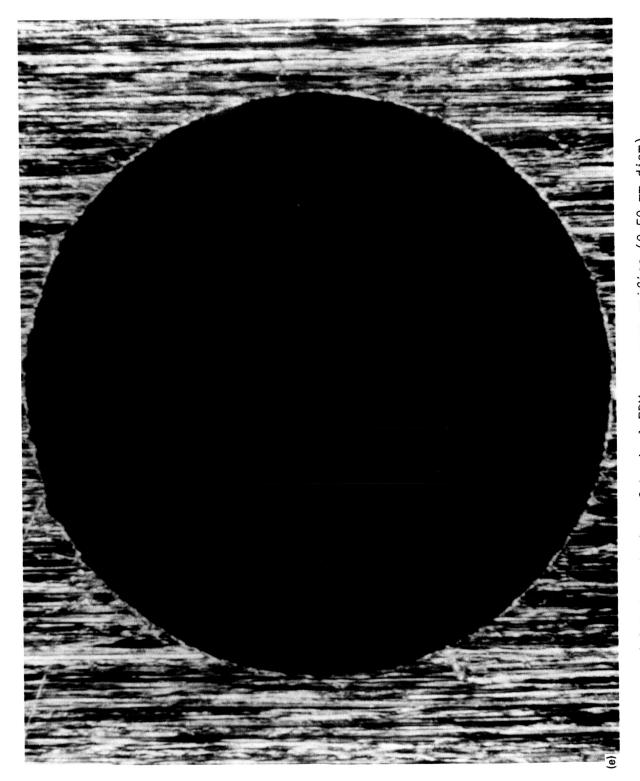
(c) Pressure tube installation.

Figure 8.- Continued.

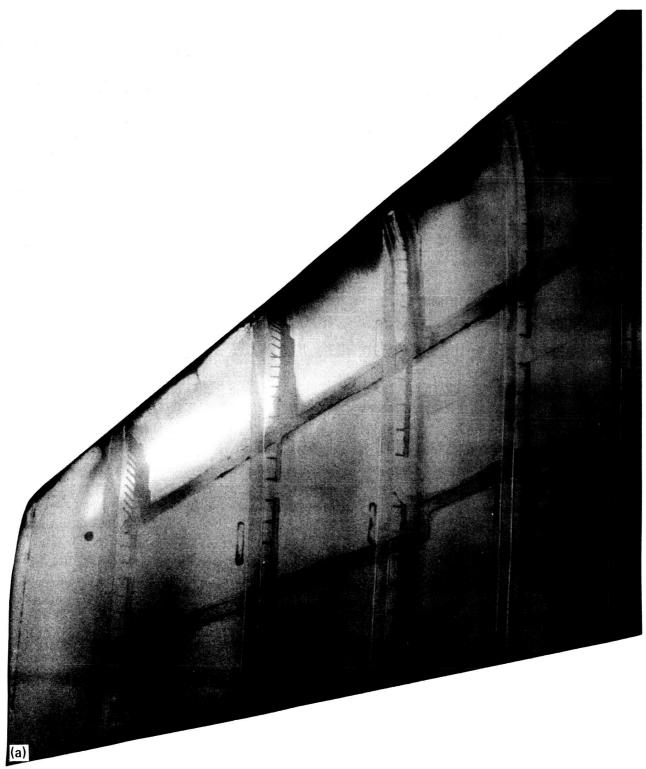


(d) Close-up view of pressure tube installation.

Figure 8.- Continued.

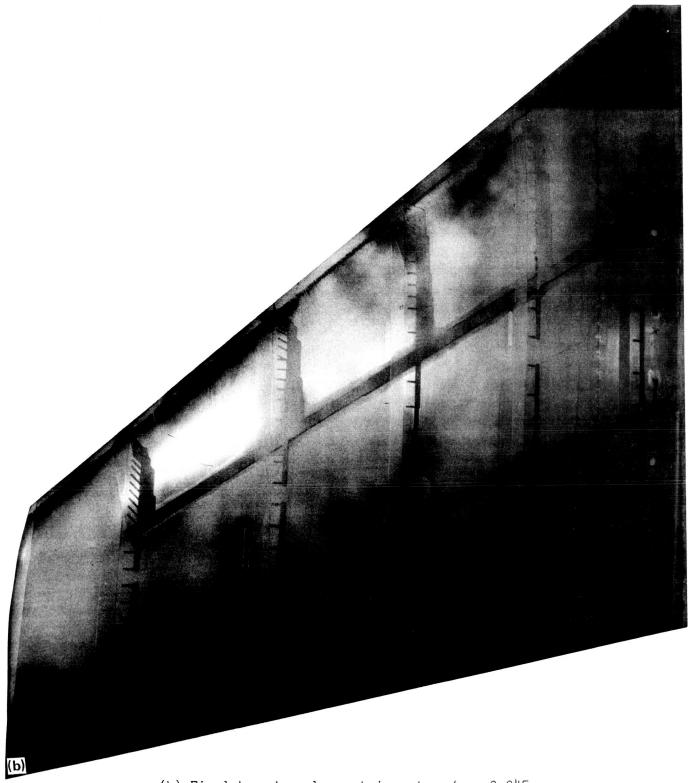


(e) Enlarged view of typical EDM pressure orifice (0.50 mm diam). Figure 8.- Concluded.



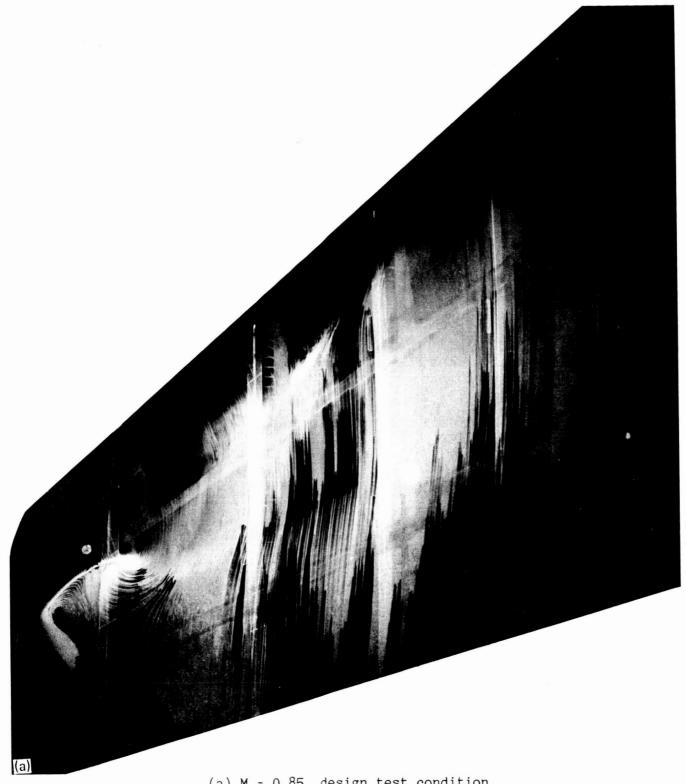
(a) No boundary-layer trips, natural transition.

Figure 9.- Photographs of sublimation tests for the location of boundary-layer transition; M = 0.85, $a = 5^{\circ}$, $Re = 10 \times 10^{6}$.



(b) Final boundary-layer trips at x/c = 0.045.

Figure 9.- Concluded.



(a) M = 0.85, design test condition.

Figure 10.- Oil-flow photographs; $a = 5^{\circ}$, $Re = 10 \times 10^{6}$.

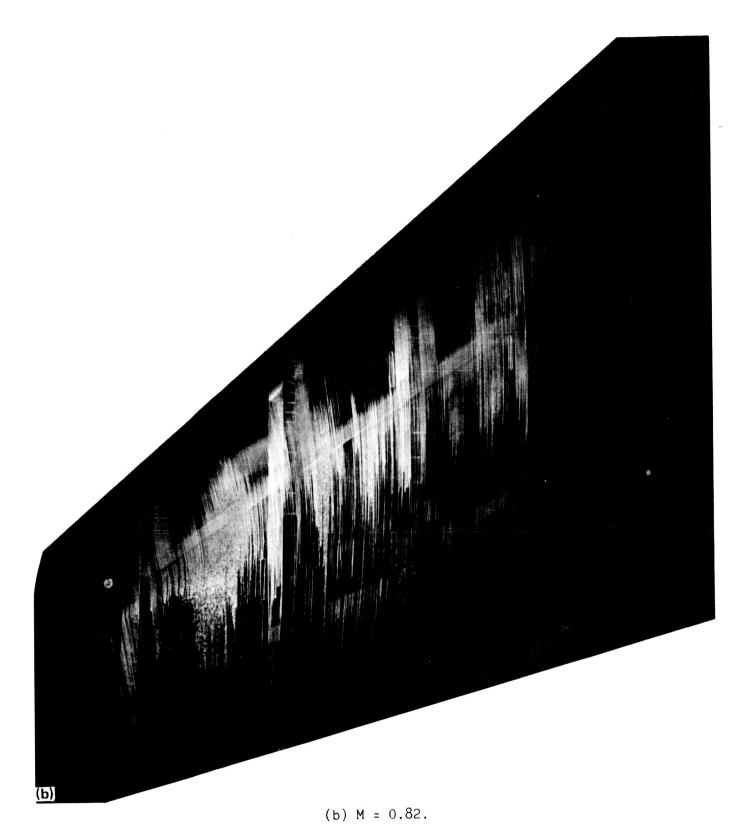
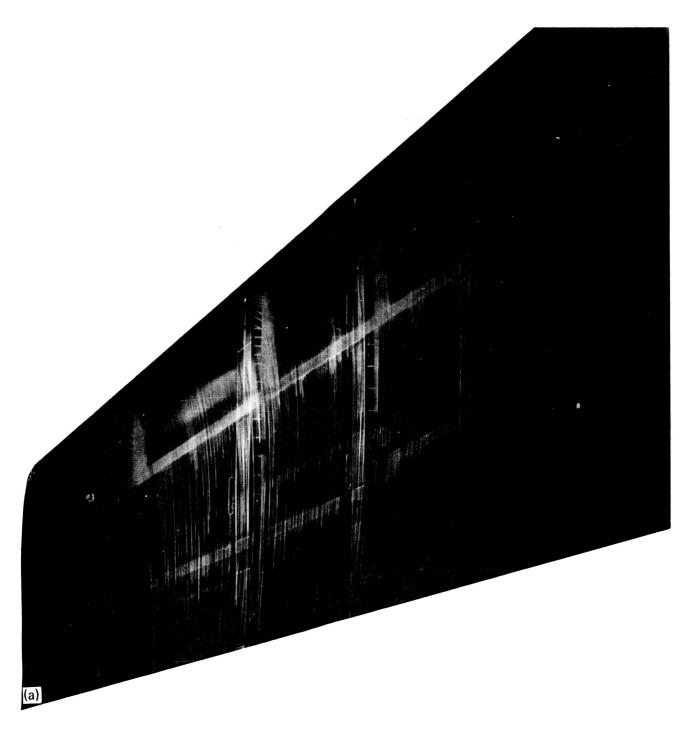
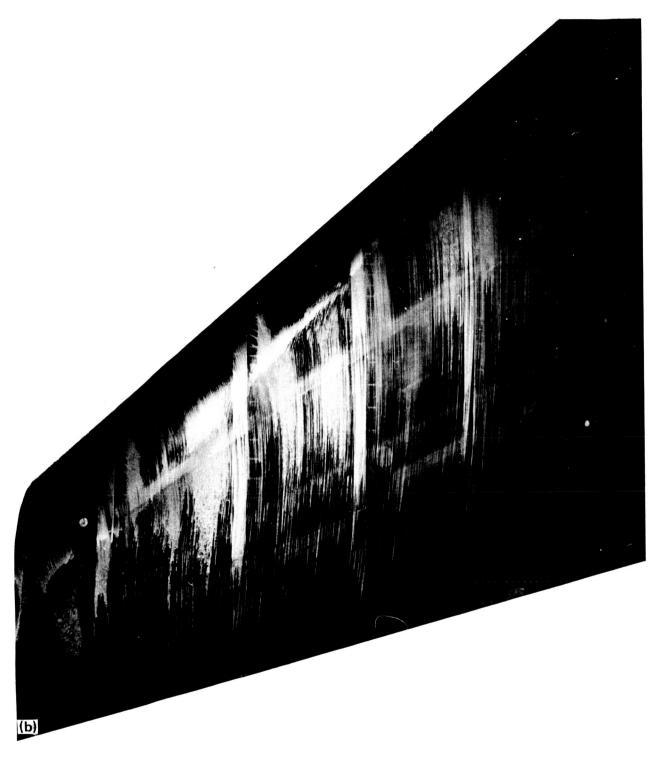


Figure 10.- Concluded.



(a) M lacktriangle 0.70.

Figure 11.- Oil-flow photographs; $a = 5^{\circ}$, $Re = 6.8 \times 10^{6}$.



(b) M = 0.82.

Figure 11.- Continued.

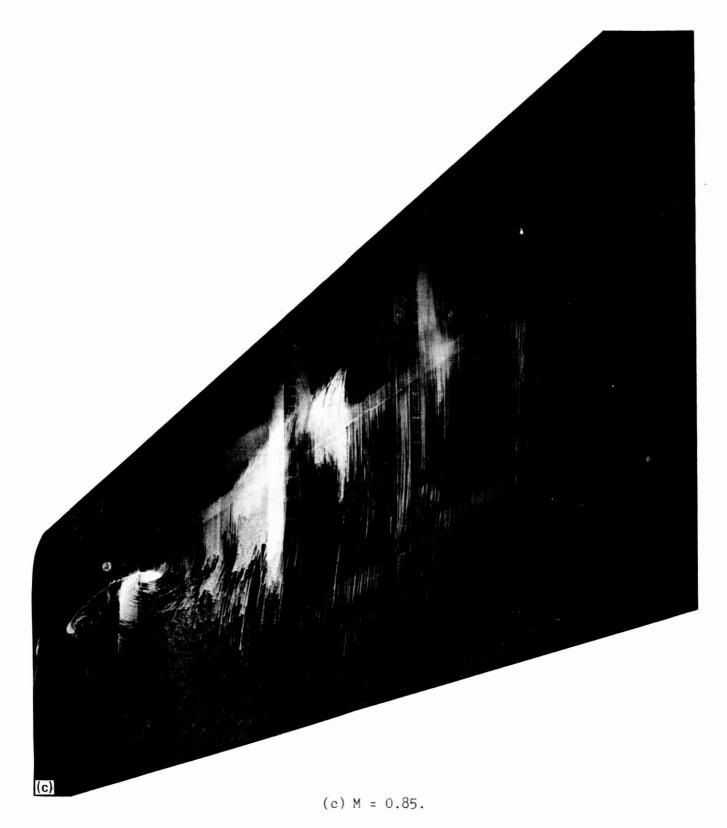


Figure 11.- Continued.



(d) M = 0.90.

Figure 11.- Continued.



(e) M = 0.95.

Figure 11.- Concluded.

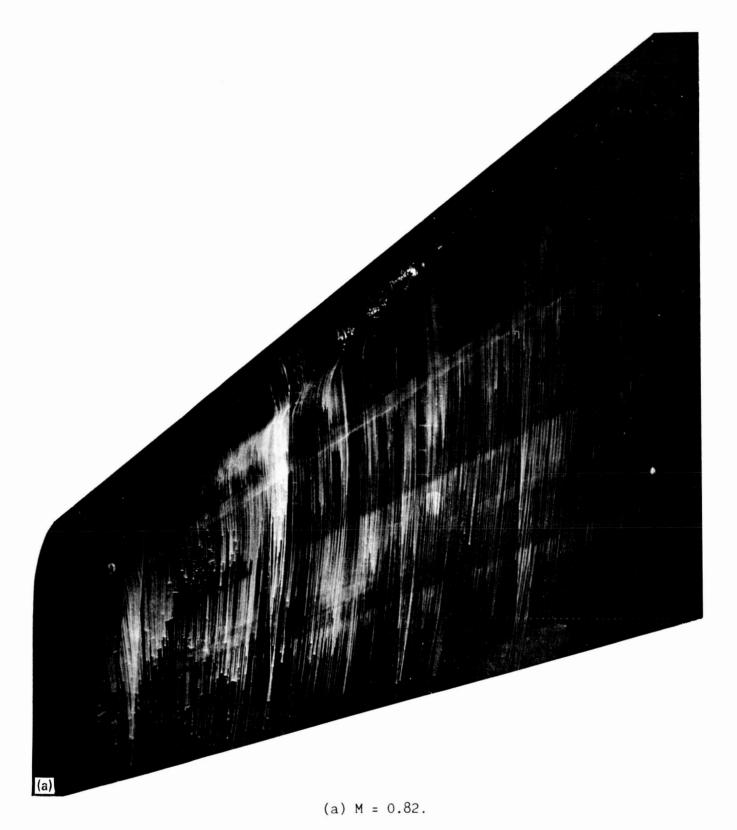


Figure 12.- Oil-flow photographs: a $= 5^{\circ}$, Re = 3.4×10^{6} .

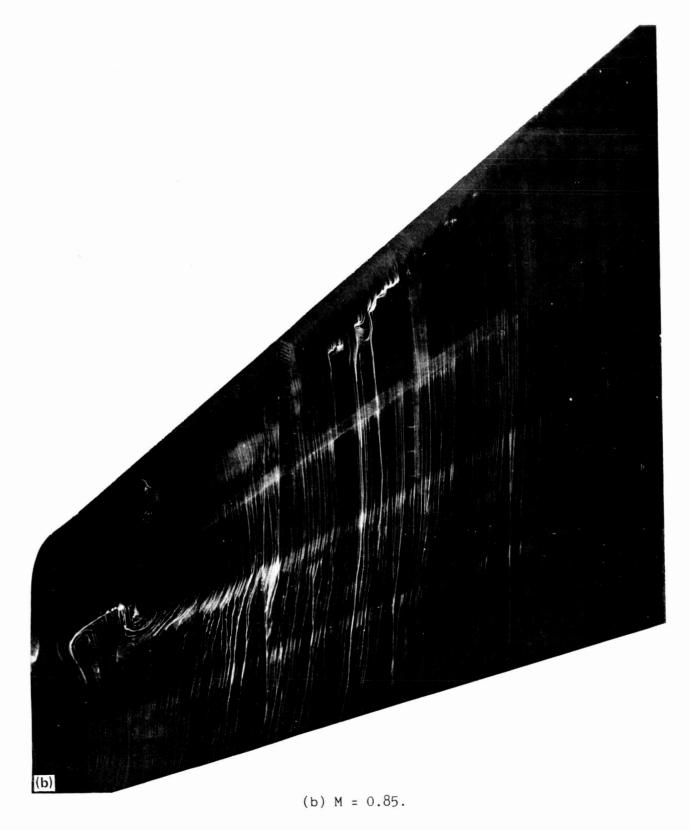


Figure 12.- Concluded.

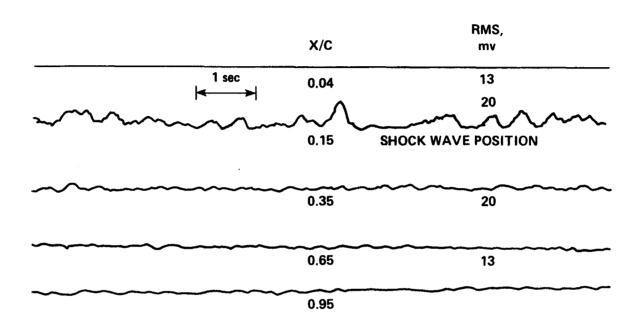


Figure 13.- Oscillograph traces of shock-wave-induced unsteady pressures at several chordwise stations; M = 0.82, $a = 5^{\circ}$, $Re = 6.8 \times 10^{6}$, n = 0.50.

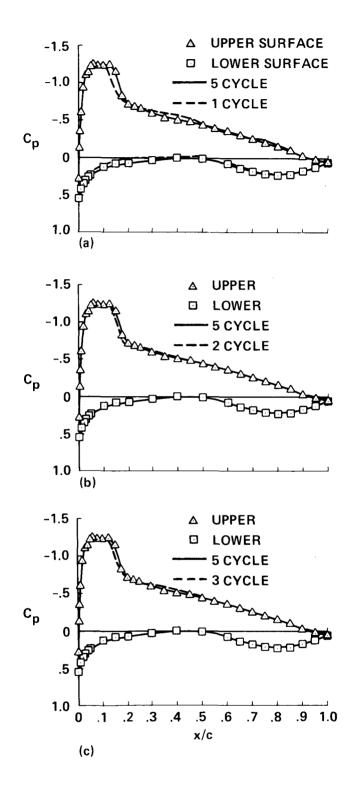
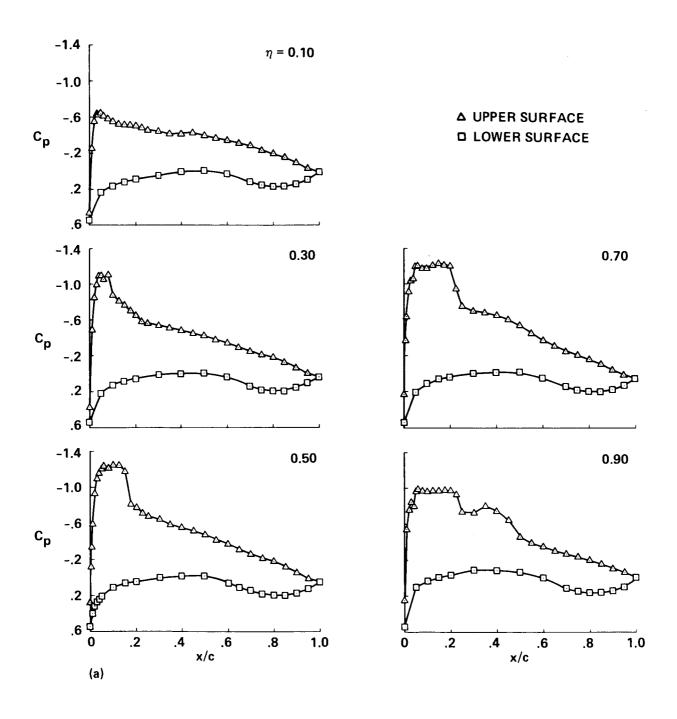
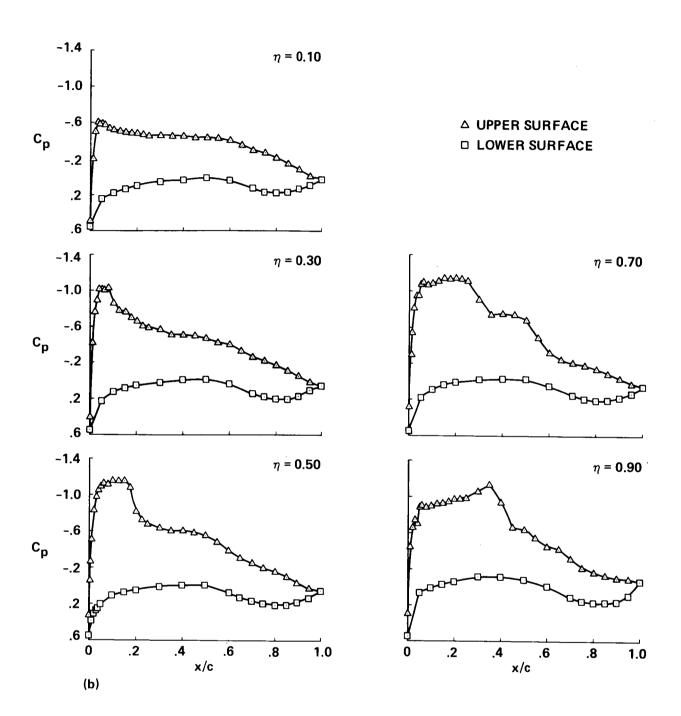


Figure 14.- Effect of multiple-cycle pressure-data averaging on experimental chordwise pressure distributrion; M = 0.82, $a = 5^{\circ}$, $Re = 6.8 \times 10^{6}$, n = 0.50. (a) One cycle. (b) Two cycles. (c) Three cycles.



(a) M = 0.82.

Figure 15.- Experimental chordwise-pressure distributions at design Reynolds number of $10 \times ^{6}$; a = 5°.



(b) M = 0.85.

Figure 15.- Concluded.

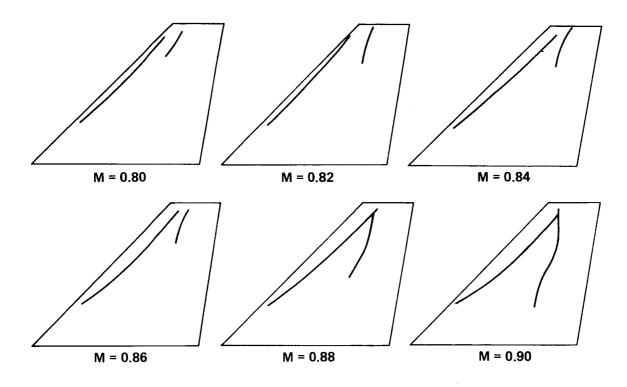
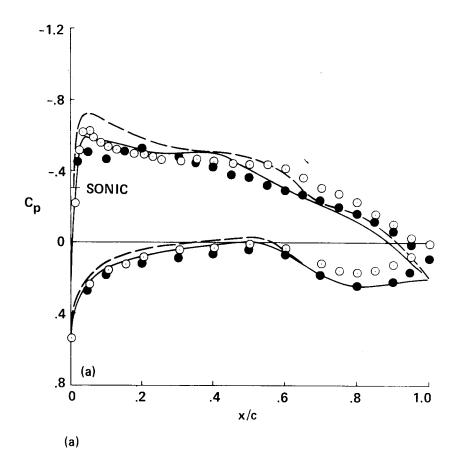


Figure 16.- Shock-wave patterns at various Mach numbers at an angle of attack of 5° (taken from ref. 3).

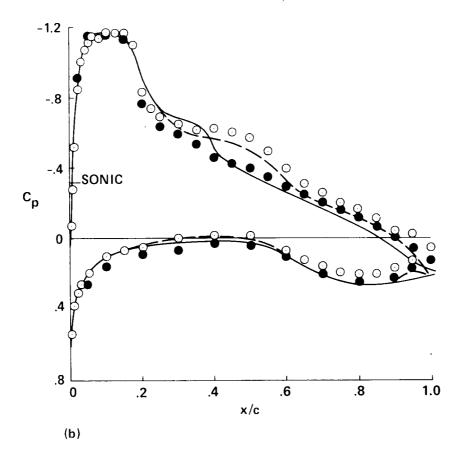
PEAK	PEAK				α , deg	c_N
С _р	M	M_{N}	0	LARGE SCALE	5.0	0.54
-0.62	1.18	0.83	•	SMALL SCALE (REF. 3)	5.9	0.54
-0.50	1.11	0.78		FLO-22 CODE	5.0	0.52
-0.60	1.16	0.82		TWING (REF. 13)	5.0	0.52



(a) n = 0.10.

Figure 17.- Comparison of experimental and predicted chordwise-pressure distributions for design conditions: M = 0.85, $a = 5^{\circ}$, $Re = 10 \times 10_6$

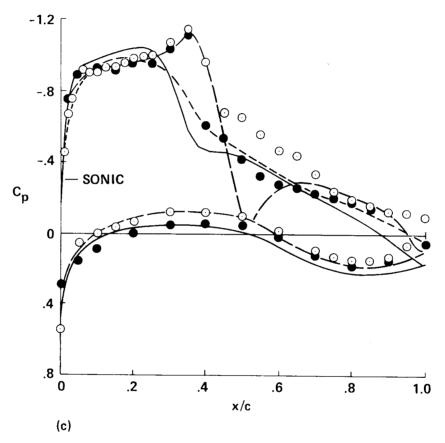
PEAK	PEAK				α , deg	c_N
Cp	M	M_{N}	0	LARGE SCALE	5.0	0.54
-1.17	1.56	1.10	•	SMALL SCALE (REF. 3-5)	5.9	0.54
-1.17	1.56	1.10		FLO-22 CODE	5.0	0.52
-1.17	1.56	1.10		TWING CODE (REF. 13)	5.0	0.52



(b) n = 0.50.

Figure 17.- Continued.

PEAK	PEAK			α , deg	c_N	η
С _р	M	M_{N}	O LARGE SCALE	5.0	0.54	0.90
-1.15	1.54	1.09	SMALL SCALE (REF. 3)	5.9	0.54	0.90
-1.13	1.52	1.07	FLO-22 CODE	5.0	0.52	0.88
-1.04	1.45	1.06	— TWING (REF. 13)	5.0	0.52	0.91
-1.00	1.41	1.00	SPECIFIED DESIGN P.D.	5.0	0.52	0.91



(c) n = 0.90.

Figure 17.- Concluded.

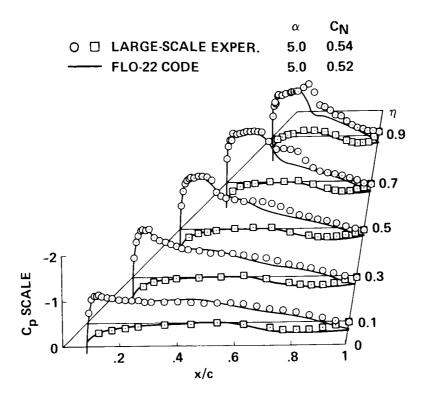


Figure 18.- Carpet-plot comparison of experimental and predicted chordwise-pressure distributions for design conditions: M = 0.85, $a = 5^{\circ}$, $Re = 10 \times 10^{6}$.

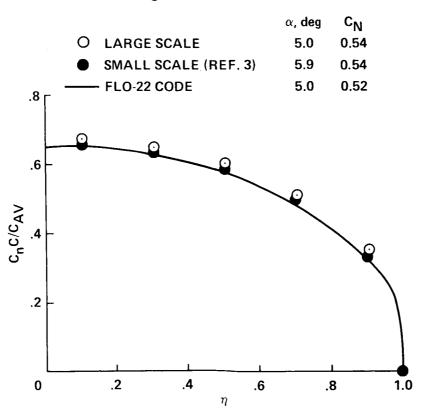


Figure 19.- Comparison of experimental and predicted spanwise load distributions for design conditions; M = 0.85, $a = 5^{\circ}$, $Re = 10 \times 10^{6}$.

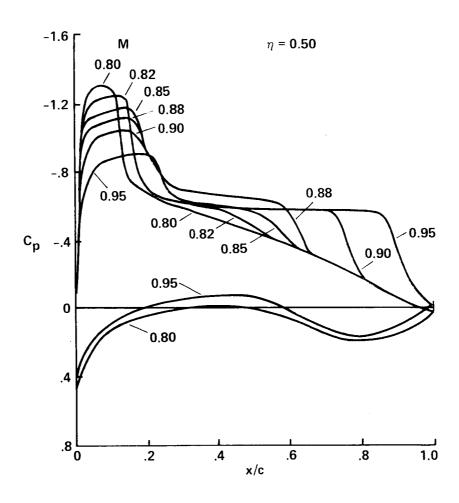


Figure 20.- Effect of Mach number on predicted chordwise pressure distributions; $a = 5^{\circ}$, Re = 10×10^{6} , n = 0.50.

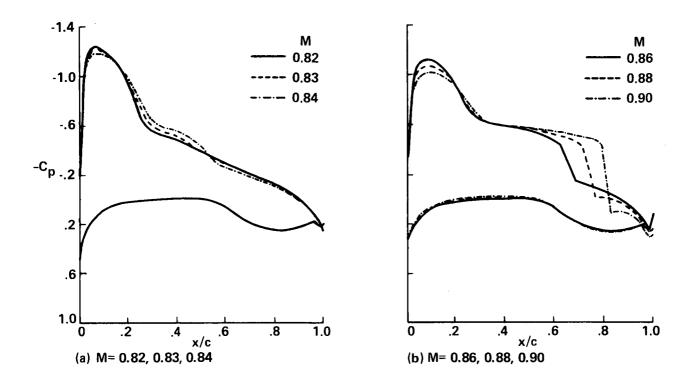


Figure 21.- Effect of Mach number on predicted chordwise pressure distributions by TWING code (refs. 10 to 12); $a = 5^{\circ}$, n = 0.51.

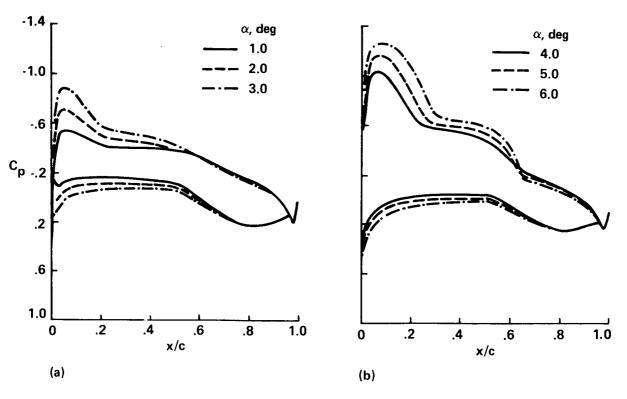


Figure 22.- Effect of angle of attack on predicted chordwise pressure distributions by TWING code (refs. 10 to 12); M = 0.85, n = 0.51. (a) $a = 1^{\circ}$, 2° , and 3° . (b) $a = 4^{\circ}$, 5° , and 6° .

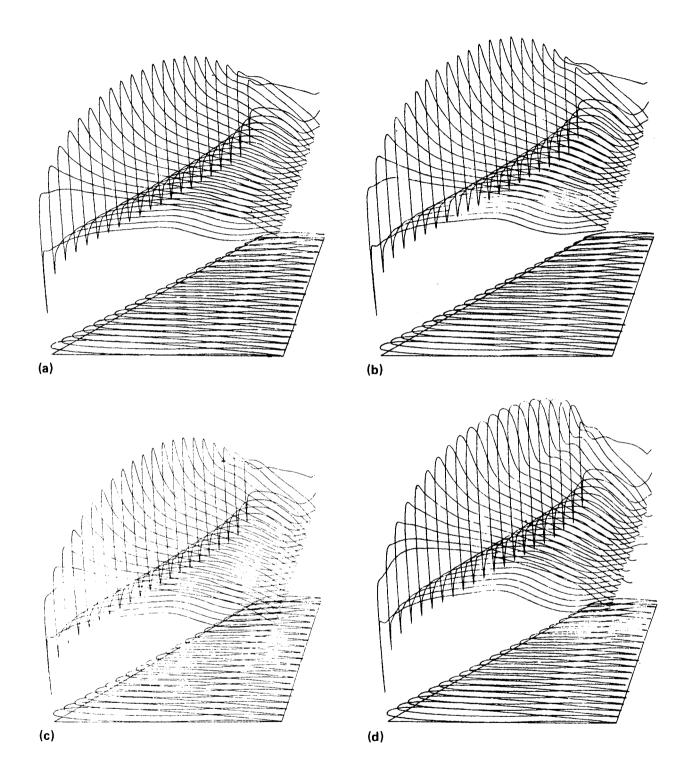


Figure 23.- Carpet plots of predicted chordwise pressure distributions by FLO22 code for off-design conditions, $a = 5^{\circ}$ (except (e)). (a) M = 0.25. (b) M = 0.50. (c) M = 0.70. (d) M = 0.82.

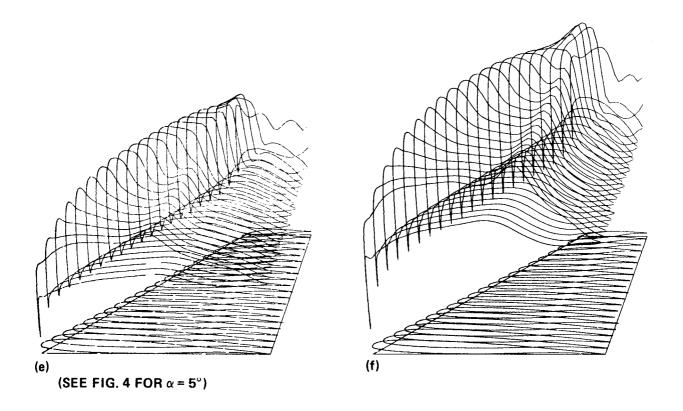
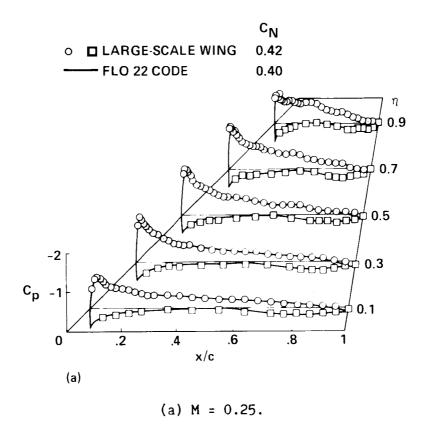


Figure 23.- Concluded. (e) M = 0.85 (a = 7°). (f) M = 0.90.



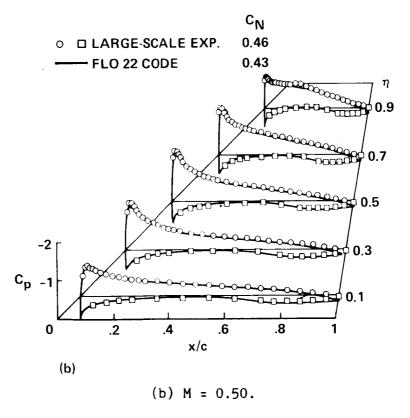


Figure 24.- Comparison of experimental and predicted pressure distributions by FL022 code at off-design conditions, $a = 5^{\circ}$.

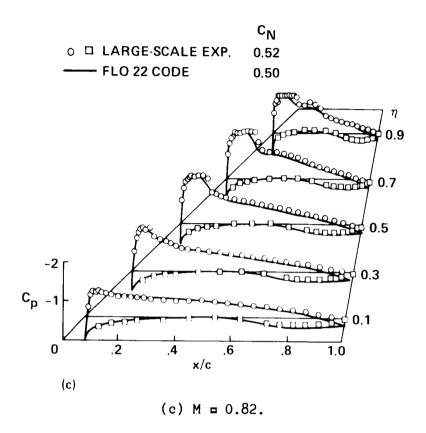


Figure 24.- Concluded.

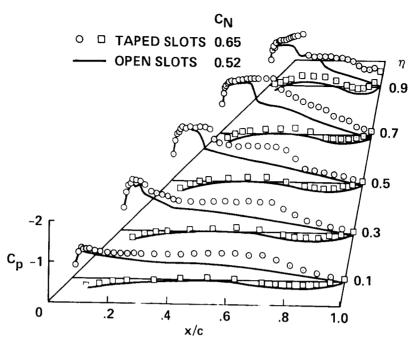


Figure 25.- Comparison of experimental pressure distributions with floor and ceiling suction slots open and taped to simulate solid walls; M = 0.82, $a = 5^{\circ}$, $Re = 6.8 \times 10^{6}$.

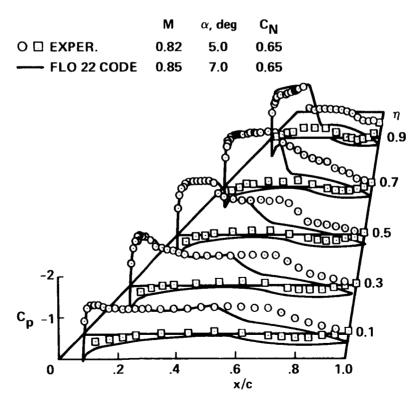


Figure 26.- Comparison of experimental pressure distributions with suction slots taped at M = 0.82 and $a = 5^{\circ}$ to those predicted by free-air code FLO22 at M = 0.85 and $a = 7^{\circ}$.

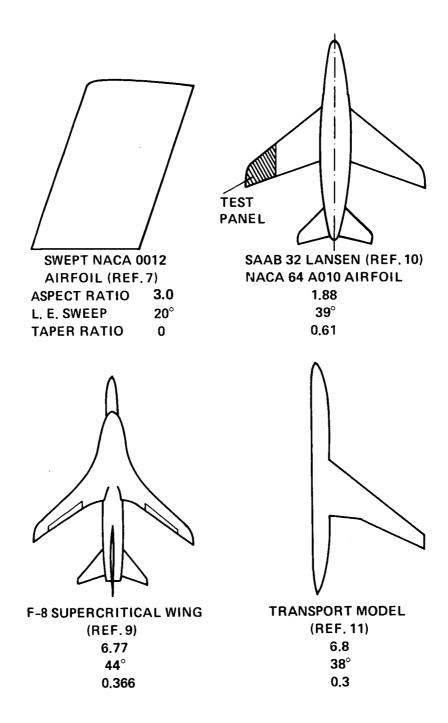
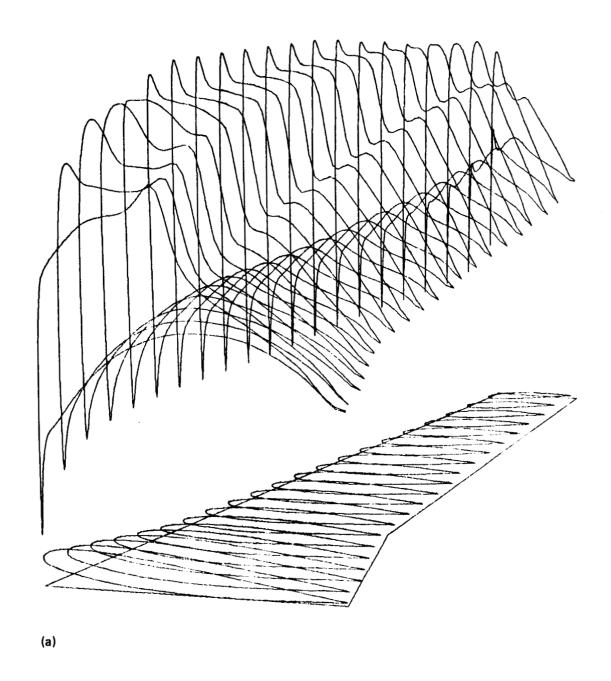
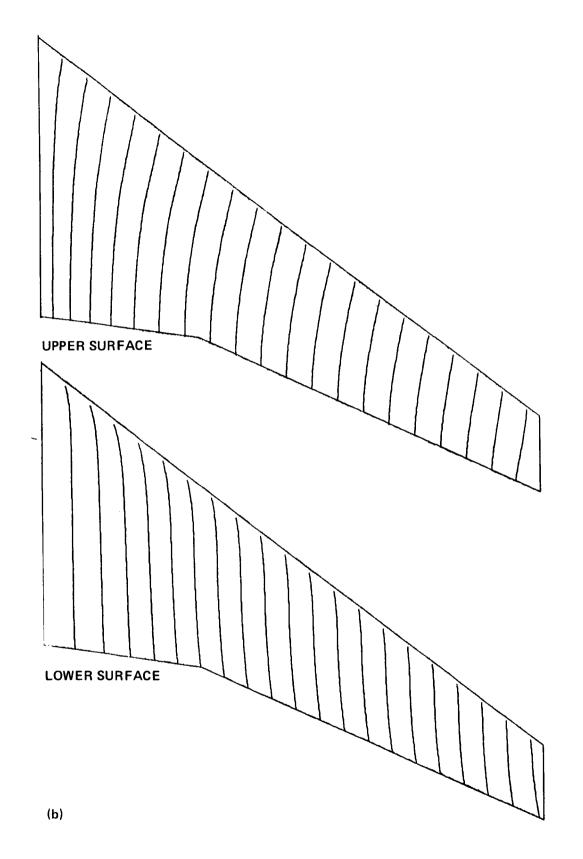


Figure 27.- Planform views of four wings whose data are relevant to the present results.



(a) Carpet of chordwise pressure distributions.

Figure 28.- Predicted inviscid wing chordwise pressure distributions by FLO22 code for McDonnel-Douglas transport wing model; M=0.85, $a=4^{\circ}$.



(b) Inviscid surface streamlines.

Figure 28.- Concluded.

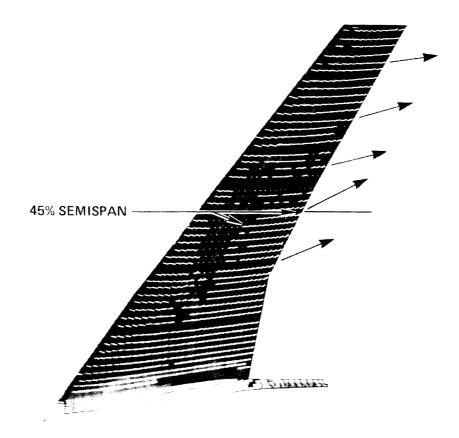


Figure 29.- Fluorescent mini-tuft flow visualization photograph of McDonnell-Douglas transport wing model (from ref. 5); M = 0.825, $a = 4^{\circ}$.

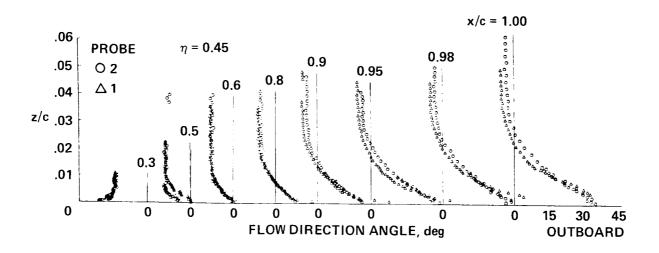


Figure 30. Boundary-layer flow-direction measurements over McDonnell-Douglas transport wing model (from ref. 5); M = 0.825, $a = 4^{\circ}$.

* BUILDING. * ROOM . * DEPARTMENT. 0000000 00 11 00000000000 SSSSSSSSS 0000000000 0000000000000 111 SSSSSSSSSSS TTTTTTTTTT 000 1111 SS SS SS SS TT 00 00 00 11 FT 00 00 00 00 11 TT 00 00 00 TT SSSSSSSSSS 00 00 00 TT SSSSSSSSSS 00 00 00 00 TT 00 SS 00 00 00 TT 00 000 00 TT 00 000000000 11111111111111 SSSSSSSSSS TŦ 0000000000000 00 0000000 0000000000 TT 11111111111111 SSSSSSSSS RRRRRRRRRRRRR FFFFFFFFFFF AAAAAAAA TITTITITI AAAAAAAAAA FFFFFFFFFFF TTTTTTTTTT WW TTTTTTTTTT RR FF AA TT WW TT FF TT AA WW TT TT TT FFFFFFFF TT RRRRRRRRRRRRRR AAAAAAAAAAAA FFFFFFFF TT TT RR RR AAAAAAAAAAA FF TT RR RR FF TT TT RR RR FF TT RR RR TT FF AA RR RR FF TT

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BSN 0860

ZDKCEXC

STOP 10

FRICK

* PROGRAMMER.

* BUILDING. * ROOM . * DEPARTMENT: SSSSSSSSS TTTTTTTTTT 00000 00000 0000000 00 11 SSSSSSSSSSS TITITITITIT 000000000 111 SS 00 00 1111 000 SS 00 00 00 11 SS TT 00 00 00 00 SSSSSSSSSS 00 00 00 00 SSSSSSSSSS TT 00 00 00 TT SS 00 00 00 11 SS TT 5P 00 00 00 00 SS TT 11 000 00 TT 000000000000 11111111111111 000000000 TT 1111111111111 00 0000000 TTTTTTTTTT TTTTTTTTTTT AAAAAAAA FFFFFFFFFF TTTTTTTTTT TTTTTTTTTT FFFFFFFFFF RRRRRRRRRRRRRR AAAAAAAAA TT FF TT RR RR TT TT FF RR TT FF TT TT FFFFFFFF RRRRRRRRRRRRRR TT **FFFFFFF** AAAAAAAAAAAA RRRRRRRRRRRRRR TT FF AAAAAAAAAAAA RR RR TT FF RR RR TT FF WWW TT FF TT AA TT FF TT

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FRICK

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TST-356 PH-1 TN-66 260-1

ID-PRESSOUTO

14 FEB 84@17.18

PAGE 0

F 260 T 269 TRANSMIT POUTO

0.85

0.90

-0.097 -0.102 -0.097 -0.109 -0.153

0.95 -0.065 -0.045 -0.059 -0.002 -0.103 1.00 -0.027 0.048 -0.016 -0.074 -0.068

WING COEFFICIENTS

RUN SEQ 260 1

Q ALPHA CONF TTR 3,47 1911 1828 529.3 80.9 5.00 28 CNU CNL CN CMU CM CB XCPU XCPL XCP CML 0.251 1 526 0.394 0.083 0.477-0.0131-0.0084-0.0215 0.2025 28.32 35.11 29.51 42.41 U.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.697 0.894 0.099 0.500 CMLS CNUS CNLS CNS CMUS 0.326 0.087 0.413-0.0317-0.0156-0.0473 34.72 42.84 36.44 0.592 0.152 X/C 0.099 -0.138 -0.377 -0.1110.393 0.090 0.483-0.0239-0.0171-0.0410 31.08 43.92 33.48 0.590 0.016 0 -0.338 0.296 0.003 0.443 0.097 0.540-0.0268-0.0185-0.0454 31.06 44.12 33.40 0.540-0.091 -0.8460.500 -1.054 -1.0890.006 0.474 0.085 0.559-0.0343-0.0142-0.0484 32.23 41.71 33.67 0.440-0.123 0.697-0.602 -1.140 -1.270 -1.268 0.463 0.036 0.499-0.0502-0.0074-0.0576 35.85 45.41 36.54 0.286-0.094 -0.890 0.01 0.894 -0.899 -1,442 -1.328 0.02 -0.865 -1.311 -0.935 -1,290 -0.862 -1.266 -1.365 0.03 WING LOWER SURFACE COEFFICIENTS -0.838 -1.277 -1.162 0.04 -0.821 -1.168 0.697 0.894 0.296 0.500 2Y/B 0.099 -1.179-0.793 -1.064 -1,173 -0.917 0.05 X/C -0.985 -1.072 -0.782 -0.705 -1.085 0.504 0.060.504 0.504 0.504 0.504 -0.764-0.593 -0.886 -0.914-0.9500.08 0.448 0.01 -0.884-0.815 -0.909-0.690 -0.6190.10 0.450 0.02 -0.816 -0.827 -0.728-0.556-0.7380.125 0.322 0.03 0.15 -0.727 -0.702-0.538-0.676 -0.7620.301 0.040.175 -0.504 -0.563 -0.709-0.752-0.702 0.237 0.05 0.226 0.256 0.1700.206 0.20 -0.584 -0.657-0.704-0.683 -0.4620.151 0.152 0.131 0.077 0.10 0.191 0.225 -0.382 -0.540-0.565-0.686 -0.670 0.088 0.15 0.089 0.103 0.095 0.080-0.5230.25 -0.434-0.602-0.650-0.609 0.057 -0.0110.20 0.072 0.0640.134 0.30 -0.394-0.473-0.543-0.622-0.684 0.081 0.30 0.033 0.035 0.021 -0.040-0.532 0.35 -0.423-0.503-0.383 -0.632 -0.0090.015 -0.070 0.40 0.017 0.079 -0.608 -0.356-0.336 -0.462-0.543 0.40 -0.007-0.0490.50 -0.009-0.0090.016 -0.325-0.379-0.425-6.4900.45 -0.5440.55 -0.251-0.339-0.328 -0.458-0.4860.50 -0.0060.0240.039 0.600.097 0.051-0.325 -0.392-0.305 -0.366-0.400 0.55 0.143 0.65 -0.294 -0.32**4** -0.366-0.4120.60 -0.269 0.134 0.70 0.119 0.078 0.0960.102 0.65-0.299 -0.264-0.262 -0.257 0.75 0.085 0.123 0.140 0.136 0.113 -0.237-0.171-0.261-0.294 0.70 -0.312 0.80 0.136 0.128 0.202 0.1070.109-0.209-0.215 -0.213 -0.243-0.259 0.75 0.85 0.1870.141 0.126 0.089 0.106 -0.175-0.134-0.222 -0.224 -0.121 0.80 0.0880.087 0.105 0.113 0.90 0.083 -0.157 -0.155 -0.159 -0.159 -0.121

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

0.344

0.030

0.059

0.95

0.105

0.127

ID-PRESSOUTO

ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

CHORDWISE ROWS								NORMAL ROWS									
ROW ID	1A 1B	2	3	4A	4B_	5A	56	6	ROW ID	A	B	C	D 25	E 25 25	F 41 25 4	G 40 25 /	H 14 05
Y	-2.75 -1.2			4.25	3.75	7,75	6.75		X X/CR					36,35 (0.866)			
Y/CR	00003	0 1,0 6	.018	.101	.089	. 185	.161	, 20,0	X/CN	0.274	J.#13	0.500	0.747	0.000	<i>3.703</i> .		
X X/CR	0.000			Λ 27 0					Y Y/CR 16.75 0.399			-0 052	P-0 176	5-0.018			
10.35 0.247 11.35 0.270	0.093 0.044			-0.328 -0.234					13.75 0.328		-0.113			3-0.120		·	
12.35 0.294	· · · · · · · · · · · · · · · · · · ·			-0.268		-0.167			10.75 0.256		-0.163	3-0.141	-0.08	7-0.020	-0.093-		
14.35 0.342	0.078			-0.249					7.75 0.185	-0.167	-0.247	7-0.156	5-0.05°	0.036	-0.076		-0.010
15,35 0,366	0.085			-0.197		•.		-0.120	6.75 0.161	0 744	0 100		-0.00	9-0.016	-0.006	0.049	U.112 -0-001
16.35 0.390				-0.143		0 247		-5.545 -0.163	5.75 0.137 4.75 0.113		-0.120	J-U. 152	-0.100 111	5-0.055	0.093	0.045	-0.001 -0.066
- 17.35 0.413 18.35 0.437	0.177 0.023			-0.279 -0.191		-0.247		-0.103	4.25 0.101		-0.279			0.000	0.047	0.0.0	0.000
19.35 0.461	0.023			-0.231				-0.061	3.75 0.089				-0.066	5-0.053			
20.35 0.485	0.065			-0.214				-0.210	2.75 0.066		_			3-0.074			
22.35 0.533	0.076			-0.152				-0.107	1.75 0.042			_		3-0.012		,	
23,35 0.556	<u>0.126</u>			-0.094		0 154		-0.152	0.75 0.018 -0.25-0.006				-0.11	5-0.057		0.042	
24,35 0,580 25,35 0,604	0.192 0.029			-0.230 -0.128		-0.156		-0.141 -0.096	-1.25-0.030				0.14	3 0.130			
25.35 0.604 26.35 0.628	0.029	<i>2</i>		-0.167				-0.035	-2.25-0.054					2 0.134			
27.35 0.652				-0.156					-2.75-0.066		0.177	7 0.192					
30.35 0.723				<u>(</u>				~0.066	-3.25-0.077	0 0 4 3	0 07/		0.11	5 0.170	0.036	0.036	0.120
31.35 0.747	0.1		-0.115					9-0.100	- 4 .25-0.101		0.070) 0.023	0.120	3 0.216 3 0.055	0.131	0.131	0.177
32.35 0.771	0.1 0.2		-0.053		0.002 0.150-			16-0.087 12-0.035	-5.25-0.125 -6.25-0.149		വ വജ്	5 n 13!		4 0.154			0.010
33.35 0.795 34.35 0.818			-0.135		-0.130 -0.042			7 0.030						0.085			J. J. J
35.35 0.842			-0.033		-0.074				-12.25-0.292		0.184	0.087	0.12	9 0.096			
36.35 0.866	0.1	30	-0.057		-0.053			6-0.020	-15.25-0.363			0.131	0.08	3 0.131			
37.35 0.890			-0.027		0.019			19-0.057	·								
38.35 0.914	0.1	55 207 0.007	0.034 7 0 106		0.059 -0.065			97-0.038 93-0.008									
39.35 0.938 40.35 0.961		36 0.029			0.036			21 9.062									
41.35 0.958		16 0.10			0.001			6-0.093									
42.35 1.009	0.0	0.166	6 0.042	2	0.018			19-0.027									
44.85 1.069		70 0.004			0.073		0.11	2-0.023									
45.85 1.092		20 0.090		_													
46.85 1.116	U. i	62 0.042	2 0.150	•													
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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

PAGE

-0.016 -0.003

1.00

0.003 -0.032 -0.044

ID-PRESSOUTO

14 FEB 84@17.18

RUN SEQ 261.1

TST-356 PH-1 TN-66 261+1

WING COEFFICIENTS Q ALPHA CONF TTR .1ACH RN/L Р CB XCPU XCPL XCP 4.60 1384 1166 530.7 204.3 5.00 28 CNU CNL CML CN CMU CM 0.420 0.084 0.504-0.0148-0.0085-0.0233 0.2144 28.53 35.09 29.63 42.57 $0.000 \, 0.00$ WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 2Y/B 0.500 0.697 0.099 0.296 0.894 CNC/ CMC/ XCPUS XCPLS XCPS CNUS CNLS (NS CMLS CMS CMUS 2Y/B 0.347 0.087 0.435-0.0343-0.0134-0.0477 34.89 40.35 35.99 0.623 0.163 X/C 0.099 -0.187 -0.258 -0.0600.417 0.090 0.507-0.0270-0.0172-0.0442 31.48 44.16 33.72 0.618 0.015 0 -0.0170.160 0.2% -0.7500.467 0.098 0.565-0.0280-0.0199-0.0479 31.00 45.20 33.47 0.565-0.096 0.003 0.500 -1.041 -1.0350.006 0.509 0.090 0.599-0.0373-0.0180-0.0554 32.33 45.14 34.24 0.471-0.134 0.697 -0.900-1.292-1:319 0.500 0.031 0.532-0.0536-0.0085-0.0621 35.71 51.98 36.67 0.305-0.100 0.01 -0.670 -1.1080.894-1.405-0.995-1.341-1.500 0.02 -0.885 -1.439-0.885-1.321 -1.378-0.9890.03 WING LOWER SURFACE COEFFICIENTS -1.231 -1.348-1.293-0.926-0.8390.04 0.500 0.697 0.8940.2% 2Y/B 0.099 -1.238-1.260-0.971-1.1750.05 -0.800X/C -1.134-1.167-0.8520.06-0.740-1.0300.516 0.516 0.516 0.516 0 -0.8110.08 -1.019-0.675-0.939-1.007 0.01 0.452 -0.786-0.856-0.963 -0.9480.10 -0.6240.394 0.02 -0.579-0.773-0.863-0.885-0.7660.125 0.335 0.03 -0.544-0.829-0.7540.15 -0.711-0.787 0.305 0.04 -0.723-0.789-0.7320.175 -0.519-0.6440.159 0.05 0.244 0.245 0.256 0.222 -0.751-0.7300.20 -0.487-0.688-0.6110.10 0.157 0.146 0.150 0.156 0.071 0.225 -0.724-0.735-0.642-0.468-0.5740.088 0.15 0.023 0.107 0.104 0.110 -0.7270.25 -0.628 -0.700-0.452--0.532 0.20 -0.0090.075 0.088 0.0600.085 -0.569-0.7390.30 -0.429-0.663-0.5040.026 0.30 0.024 -0.0580.040 0.055 -0.392-0.511-0.6890.35 -0.443-0.6180.40 0.006-0.0650.029 0.016 0.018 -0.640-0.476-0.563-0.375-0.4120.40 0.50 -0.0080.017 0.018 -0.002-0.068-0.584-0.356-0.456 -0.531-0.3920.45 0.55 0.50 -0.321-0.515-0.353 -0.411-0.481 0.052 0.054 0.60 0.045 0.047 -0.315-0.322-0.3790.55 -0.441-0.4560.098 0.65 -0.333 -0.416-0.293 -0.306 -0.387 0.128 0.125 0.60 0.090 0.128 0.70 0.093 -0.279-0.296 -0.336-0.369-0.2660.65 0.145 0.139 0.113 0.141 0.75 0.114 -0.256 -0.242 -0.275 -0.298 0.160 0.131 0.149 0.160 0.115 0.80-0.228 -0.250-0.274-0.227 -0.228 0.75 0.145 0.157 0.149 0.120 0.85 0.114-0.186 -0.190 -0.188 -0.205-0.2420.80 0.088 0.107 0.90 0.122 0.126 0.090 -0.149 -0.165 -0.144 - 0.142-0.184 0.85 0.086 0.084 0.048 0.055 0.073 0.95 -0.099 -0.1100.003 -0.032 0.90 -0.103 -0.097 -0.144-0.044-0.016 -0.003 1.00 -0.039 -0.053 -0.045 -0.049-0.101 0.95

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER. MOFFETT FIELD, CALIF. PRELIMINARY DATA ID-PRESSOUTO 14 FEB 84@17.18 CONT. PAGE 4

TST-356 PH-1 TN-66 261+1

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y Y/CR	1A 1B -2.75 -1.25 - 066030 -		4B 5A 5B 6 3.75 7.75 6.75 10.75 .089 .185 .161 .256	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.556 22.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.652 30.35 0.723 31.35 0.747 32.35 0.771 33.35 0.771 33.35 0.795 34.35 0.842 36.35 0.842 36.35 0.842 36.35 0.842 36.35 0.914 39.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.958 42.35 1.069 44.85 1.069 45.85 1.092 46.85 1.116	0.044 0.078 0.085 0.126 0.177 0.023 0.111 0.065 0.076 0.126 0.192 0.029 0.131 0.098 0.143 0.193 0.257 0.094 0.195 0.130 0.121 0.155 0.207 0.036 0.116 0.083 0.070 0.120	-0.328 -0.234 -0.268 -0.249 -0.197 -0.143 -0.279 -0.191 -0.231 -0.214 -0.152 -0.094 -0.135 -0.053 0.004 -0.135 -0.057 -0.027 0.034 0.007 0.106 0.029-0.037 0.101 0.079 0.166 0.042 0.004 0.057 0.090 0.090 0.042 0.158	-0.167 -0.120 -5.545 -0.163 -0.117 -0.061 -0.210 -0.152 -0.156 -0.096 -0.035	Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 -0.163-0.141-0.087-0.020-0.093-0.027 7.75 0.185 -0.167-0.247-0.156-0.059 0.036-0.076 -0.010 6.75 0.161 5.75 0.137 4.75 0.133 4.25 0.101 -0.244-0.120-0.182-0.100-0.014 0.093 0.045-0.001 4.75 0.161 5.75 0.089 2.75 0.089 2.75 0.086 1.75 0.018 -0.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.007 -4.25-0.101 -5.25-0.125 -6.25-0.125 -6.25-0.125 -6.25-0.129 -0.131 0.085 0.131 0.214 0.154 0.098 -0.131 0.083 0.131

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

0.95

1.00

-0.058 -0.033 -0.023 -0.034 -0.106

-0.026 0.017 0.014 -0.015 -0.052

TST-356 PH-1 TN-66 262.1

RUN. SEQ 262.1

WING COEFFICIENTS Q ALPHA CONF MACH RN/L TTR XCPU XCPL XCP 28 CNU CNL CN CMU CM 955 532.1 239.9 5.00 0.599 2.029 4,62 1217 0.429 0.088 0.518-0.0156-0.0094-0.0250 0.2201 28.63 35.60 29.82 42.49 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.697 0.099 0.894 0.500 0.296 CMS XCPUS XCPLS XCPS CMLS CNC/ CMC/ CNUS CNLS CNS CMUS 2Y/B 0.354 0.095 0.449-0.0366-0.0153-0.05+35.34 41.11 36.57 0.643 0.163 X/C 0.099 0.251 -0.100-0.181-0.0290.077 0.426 0.098 0.524-0.0279-0.0196-0.0475 31.55 45.07 34.07 0.639 0.013 0 0.296 -0.6400.003 0.479 0.099 0.578-0.0280-0.0218-0.0498 30.86 47.04 33.62 0.577-0.099 0.500 0.520 0.091 0.611-0.0349-0.0199-0.0549 31.72 46.83 33.98 0.481-0.136 -0.960-0.9480.006 0.697 -1.256-1.259-0.9180.519 0.031 0.550-0.0550-0.0085-0.0635 35.60 52.57 36.55 0.315-0.103 0.01 -0.588 -1.0390.894 -1.551-1.457 -1.351 -1.0330.02 -0.833 -1.495-1.430-1.017-1.3410.03 -0.860WING LOWER SURFACE COEFFICIENTS -0.824-1.401-1.345-0.994-1.2670.04 0.500 0.697 2Y/B 0.099 0.894 0.296 -1.363-1.305-1.032-0.794-1.2100.05 X/C -0.922-1.2600.06 -0.720-1.166 -1.0480.523 0.523 0.523 0.523 0.523 0 -0.855-0.671-0.949-1.042-1.0100.08 0.454 0.01 -0.830-0.978-0.9860.10 -0.635-0.8600.385 0.02 -0.8070.125 -0.888 -0.913-0.588-0.7750.03 0.328 -0.7890.15 -0.811-0.864-0.555-0.7230.303 0.04 -0.810-0.764-0.516-0.7480.175 -0.6650.05 0.248 0.150 0.226 0.247 0.245 0.20 -0.520-0.716-0.774-0.766-0.6340.154 0.149 0.075 0.10 0.160 0.144 -0.4930.225 -0.669-0.578-0.734-0.7490.15 0.085 0.031 0.100 0.0960.112 0.25 -0.738-0.643 -0.478-0.546-0.7150.20 0.082 0.057 -0.0070.069 0.096 0.30 -0.587-0.698-0.747-0.437-0.5000.30 0.021 -0.0670.031 0.073 0.047 0.35 -0.540-0.656-0.719-0.478-0.411-0.001-0.0620.038 0.013 0.40 0.046 -0.503 -0.598-0.386-0.6650.40 -0.4400.50 0.017 0.004 0.004 -0.0600.006 -0.607-0.4640.45 -0.376-0.534-0.4110.55 0.50 -0.486-0.540-0.337-0.381-0.4270.60 0.059 0.056 -0.0170.044 0.045 -0.319-0.389 -0.441-0.4840.55 -0.3440.65 0.108 -0.305-0.313-0.346-0.3980.60 -0.438 0.132 0.079 0.70 0.136 0.111 0.128 -0.278-0.290-0.308 -0.345-0.3640.152 0.65 0.75 0.108 0.144 0.129 0.161 -0.309-0.256-0.253-0.277-0.3020.70 0.80 0.1580.1640.166 0.126 0.131-0.225 -0.234-0.221-0.280-0.2420.85 0.158 0.122 0.124 0.157 0.157 -0.185 -0.193 -0.202 -0.191 -0.248 0.106 0.90 0.119 0.143 0.133 0.093 -0.146 -0.150 -0.152 -0.148 -0.195 0.85 0.95 0.067 0.081 0.095 0.088 0.056 -0.106 -0.094 -0.085 -0.093 -0.150 1.00 -0.026 0.017 0.014 -0.015 -0.052 0.90

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

		CHORDWISE ROWS		NORMAL ROWS
ROW ID Y	1A 1B	2 3 4A -0 35 0 75 4 35	4B 5A 5B 6 3.75 7.75 6.75 10.75	ROW ID A B C D E F G H
•	-2.75 -1.25 ·066030 ·		3,75 7,75 6,75 10,75 ,089 ,185 ,161 ,256	X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.58′ 0.747 0.866 0.985 1.009 1.069
	.000	,000 ,010 ,101		77 CT
X X/CR	• • • • •		_	Y Y/CR
10.35 0.247	0.093	-0.328		16.75 C.399 -0.052-0.176-0.018
11,35 0,270 12,35 0,294	0.044	-0.234 -0.268		13.75 0.328 -0.113-0.074 0.013-0.120 10.75 0.256 -0.163-0.141-0.087-0.020-0.093-0.027
14.35 0.342	0.078	-0.249		7.75 0.185 -0.167-0.247-0.156-0.059 0.036-0.076 -0.010
15.35 0.366	0.085	-0.197		
16.35 0.390	0.126	-0.143		5.75 0.137 -0.244-0.120-0.182-0.100-0.014 0.093 0.045-0.001
17.35 0.413	0.177	-0.279		
18.35 0.437 19.35 0.461	0.023 0.111	-0.191 -0.231		4.25 0.101 -0.268-0.279-0.230
20.35 0.485	0.065	-0.214		3.75 0.089 -0.066-0.053 0.001 0.018 0.073 2.75 0.066 -0.083-0.074 0.016 0.014-0.041
22.35 0.533	0.076	-0.152		1.75 0.042 -0.178-0.012 0.022 0.075 0.151
23.35 0.556	0.126	-0.094		
24.35 0.580	0.192	-0.230	· · -	-0.25-0.006 0.101 0.166 0.004
25.35 0.604 26.35 0.628	0.029 0.131	-0.128		-1.25-0.030
27.35 0.652	0.131	-0.167 -0.156		-2.25-0.054 0.172 0.134 0.195 0.195 0.080 -2.75-0.066 0.177 0.192
30.35 0.723	0.090	0.130	-0.066	• • • • • • • • • • • • • • • • • • • •
31.35 0.747	0.143	-0.115	-0.066-0.059-0.009-0.100	-4.25 -0.101 0.042 0.070 0.023 0.128 0.216 0.131 0.131 0.177
32.35 0.771	0.193	- ,	0.002 -0.146-0.087	-5.25-0.125 0.163 0.055 0.085 0.085 0.025
33.35 0.795	0.257		-0.150 -0.042-0.035	0,0,0
34.35 0.818 35.35 0.842	0.094 0.195		-0.042 -0.087 0.030 -0.074 -0.077-0.140	
36.35 0.866	0.130		-0.053 -0.016-0.020	
37.35 0.890	0.121	-0.027	0.019 0.049-0.057	0.131 0.003 0.131
38.35 0.914	0.155		0.069 -0.097-0.038	
39.35 0.938			-0.065 0.003 0.008	
40.35 0.961 41.35 0.958		0.029-0.037 0.101 0.079	0.036 -0.021 0.062	
42.35 1.009		0.166 0.042	0.001 -0.006-0.093 0.018 0.049-0.027	
44.85 1.069	_ · ·	0.004 0.057	0.073 0.112-0.023	
45.85 1.092	_ ·	0.090 0.090		
46.85 1.116	0.162	0.042 0.158		
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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

P TTR Q ALPHA CONF

WING COEFFICIENTS

RUN SEQ 263.1

MACH RN/L

0.703 2.033 4.62 1102 793 533.9 274.2 5.00 28 CNU CNL CN CMU CML CM CB XCPU XCPL XCP 0.471 0.074 0.545-0.0197-0.0083-0.0280 0.2315 29.18 36.25 30.14 42.49 0.000 0.00 WING SECTION COEFFICIENTS WING UPPER SURFACE COEFFICIENTS CNUS CNLS CNS CMUS CMLS CMS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B 0.296 0.500 2Y/B 0.099 0.697 0.8940.394 0.080 0.474-0.0470-0.0131-0.0600 36.93 41.21 37.65 0.680 0.162 0.099 X/C 34.45 0.

34.792 33.38 0.6

33.38 0.6

30.647.35.24 62.68 36.06 0.336-1

30.650 0.697 0.894

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30 0.466 0.083 0.549-0.0338-0.0181-0.0519 32.26 46.84 34.45 0.670 0.010 0 0.316 0.296 0.176 0.028 0.519 0.084 0.603-0.0313-0.0193-0.0506 31.02 47.92 33.38 0.603-0.102 0.500 -0.4680.570 0.073 0.643-0.0374-0.0176-0.0550-31.56 49.12 33.55 0.506-0.142 -0.741 - 0.7840.697 0.567 0.017 0.585-0.0581-0.0066-0.0647 35.24 62.88 36.06 0.336-0.109 -1.051-1.109-1,427 -1,409 -1,129 WING LOWER SURFACE COEFFICIENTS -1.604-1.577 -1.133 0.296 0.500 0.697 0.894 2Y/B 0.099 -1.630 -1.613-1.091X/C -1.697 -1.629 0.532 0 -1.605 -1.558 -1.0770.01 -1.028-0.915-1.4400.02 -0.995-0.996-0.9030.03 -0.940-0.928-0.8930.04 -0.868-0.927-0.8720.05 0.204 0.224 -0.807 -0.875 -0.8600.10 0.137 0.131 -0.782 -0.849-0.8780.15 0.102 0.091 -0.741-0.807-0.8460.20 0.0860.062-0.784-0.707-0.8390.30 0.046 0.005 -0.630 -0.764-0.8480.007 0.40 -0.005-0.589 -0.727-9.8030.50 0.008 -0.018 -0.550 -0.654-0.7260.55 -0.530 -0.593-0.6520.60 0.042 0.023 -0.476-0.529-0.5640.65 -0.423-0.475-0.4960.70 0.132 0.101 -0.367-0.432-0.4460.75 0.115 0.147 -0.329 - 0.377-0.3760.80 0.169 0.127-0.296 -0.316 -0.325 0.85 0.127 0.154 -0.276 -0.252 -0.251 -0.257 -0.292 0.90 0.092 0.117 -0.245 -0.215 -0.205 -0.214 -0.267 0.054 0.072 0.95 -0.200 -0.166 -0.160 -0.166 -0.212 1.00 -0.007 0.008 0.002 -0.022 -0.067 -0.109 -0.111 -0.161 -0.098 -0.172 -0.053 -0.044 -0.032 -0.035 -0.123 0.95 -0.007 0.008 0.002 -0.022 -0.067 1.00

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y Y/CR	1A 1B 2 -2.75 -1.25 -0.25	WISE ROWS 3 4A 4B 5A 0.75 4.25 3.75 7.75 .018 .101 .089 .185	5B 6 6,75 10,75 ,161 ,250		NORMAL ROWS A B C D E F G H 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.556 24.35 0.556 24.35 0.556 24.35 0.604 26.35 0.628 27.35 0.628 27.35 0.628 27.35 0.723 31.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.795 34.35 0.842 36.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 41.35 0.938 42.35 1.069 44.85 1.069 45.85 1.092 46.85 1.116	0.078 0.085 0.126 0.177 0.023 0.111 0.065 0.076 0.126 0.192 0.029 0.131 0.098 0.143 0.193 0.257 0.094 0.195 0.130 0.121 0.155 0.207 0.036 0.029 0.116 0.101 0.083 0.166 0.070 0.004 0.120 0.090	0.004 -0.1500.135 -0.0420.033 -0.0740.057 -0.0530.027 0.019 0.034 0.069 - 0.106 -0.065 0-0.037 0.036 - 0.079 0.001 - 0.042 0.018 0.057 0.073	-0.096 -0.035 -0.066	6.75 0.161 5.75 0.137 4.75 0.113	

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD. CALIF. PRELIMINARY DATA

WING COEFFICIENTS

Q ALPHA CONF

TTR

RUN SEQ 264 1

MACH RN/L

XCPU XCPL XCP CM CB CML 5.89 2093 1766 534.2 307.9 5.00 28 CNU CMU CNL CN 0.499 3.029 0.420 0.085 0.505-0.0150-0.0088-0.0238 0.2146 28.57 35.31 29.71 42.50 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.500 0.296 0.697 0.894 CNC/ CMC/ 0.099 CMS XCPUS XCPLS XCPS CMUS CMLS CNUS CNUS CNS 2Y/B 0.347 0.089 0.436-0.0345-0.0143-0.0488 34.95 41.00 36.19 0.625 0.162 X/C 0.099-0.273 -0.196-0.010-0.0620.418 0.090 0.508-0.0279-0.0175-0.0454 31.69 44.44 33.95 0.619 0.013 0.184 0 0.296-0.7480.474 0.099 0.573-0.0293-0.0190-0.0484 31.19 44.21 33.44 0.573-0.097 0.003 0.500 0.505 0.090 0.594-0.0360-0.0182-0.0543 32.14 45.31 34.13 0.468-0.133 -1.047 -1.0410.006 0.697 -0.650 -1.116 -1.316 -0.9040.492 0.038 0.530-0.0524-0.0102-0.0626 35.66 51.67 36.91 0.304-0.100 -1,289 0.01 0.594-1.502 -0.976-0.878 - 1.345-1.404 0.02 -1.458 -0.970-1.369-0.884 -1.321 0.03 WING LOWER SURFACE COEFFICIENTS -0.937-1.341 -1.285 -0.809 - 1.2110.04 0.500 0.697 0.894 2Y/B 0.099 0.296 -0.777 -1.084-1.216-1.243-0.9490.05 X/C -1.153 -1.094 -0.828-0.746 -1.0140.060.516 0.516 0.516 0.516 0 0.516 -0.81880.0 -1.044-0.673 -0.943-1.017 0.4530.01 -0.779-0.629 -0.863 -0.9720.10 -0.957 0.020.403 -0.759-0.589 -0.785 -0.864-0.8750.125 0.333 0.03-0.791-0.829-0.7560.15 -0.560-0.7040.04 0.288 -0.743-0.792-0.735-0.536-0.6410.175 0.157 0.05 0.236 0.293 0.247 $^{\circ}0.227$ -0.730-0.703-0.756 0.150 0.20 -0.486-0.6050.078 0.10 0.148 0.154 0.164 -0.721-0.7080.225 -0.455-0.574-0.6570.15 0.098 0.092 0.042 0.113 0.092 0.25 -0.448 -0.533 -0.635-0.701-0.6940.060 J 001 0.0860.20 0.077 0.074 0.30 -0.534-0.711-0.429-0.485-0.6530.037 -0.0560.032 0.30 0.031 0.054 0.35 -0.394-0.531-0.614-0.681-0.4420.009 -0.0530.005 0.40 0.033 0.028 -0.375-0.494-0.558 0.40 -0.630-0.008-0.4070.50 -0.0550.001 0.012 0.002 -0.5760.45 -0.351-0.457 -0.392-0.5340.55 -0.3190.50 -0.404-0.501-0.380-0.4810.60 0.038 -0.6010.036 0.061 0.045 0.55 -0.308 -0.345-0.379-0.427-0.4410.65 0.115 -0.301 -0.349-0.385-0.3130.60 -0.400 0.70 0.129 0.126 0.0990.101 0.114 -0.312-9.328-0.3700.65-0.270-0.267 0.75 0.155 0.109 0.139 0.146 0.118 -0.2770.70 -0.245-0.294-0.317-0.229 0.80 0.150 0.152 0.175 0.116 0.129-0.222 -0.256-0.2710.35 0.75 -0.219-0.220 0.123 0.123 0.159 0.152 0.157 0.80 -0.170-0.20i -0.180-0.212-0.218 0.103 0.900.0960.113 0.125 0.119 0.85 -0.153 -0.156 -0.153 -0.162-0.1710.092 0.076 0.0610.95 0.065 0.0730.90 -0.106 -0.102-0.110 -0.097-0.146-0.022 -0.045(0.005)-0.003-0.0261.00 -0.057 -0.049 -0.050 -0.034 -0.1090.95 1.00 -0.026 0.605 -0.008 -0.022 -0.045

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

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WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHOS	DWISE ROWS	NORMAL ROWS				
ROW ID	1A 1B 2	3 4A 4B 5A	5B 6	ROW ID	A B C D	E F G H	
Y	-2.75 -1.25 -0.25	_	6.75 10.75	X	12.35 17.35 24.35 31.3	35 36.35 41.35 42.35 44.85	
Y/CR	066030006	.018 .101 .089 .185	.161 .256	X/CR	0.294 0.413 0.580 0.74	17 0.866 0.985 1.009 1.069	
x X/CR		•		Y Y/CR			
10.35 0.247	0.093	-0.328		16.75 0.399	-0.052-0.1	76-0.018	
11.35 0.270		-0.234		13.75 0.328	-0.113-0.074 0.0		
12.35 0.294		-0.268 -0.167		10.75 0.256		087-0.020-0.093-0.027	
14.35 0.342	0.078	-0.249			-0.167-0.247-0.156-0.0	0.010 -0.010	
15,35 0,366	0.085	-0.197	-0.120	6.75 0.161		09-0.016-0.006 0.049 0.112	
16.35 0.390		-0.143	-5.5 4 5		-U.244-U.12U-U.182-U.1	00-0.014 0.093 0.045-0.001 15-0.055 0.047 0.016 0.066	
17.35 0.413	0.177	-0.279 -0.247	-0.163 -0.117	4.75 0.113	-0.268-0.279-0.279	15-0.055 0.047 0.010 0.000	
18.35 0.437	0.023	-0.191 -0.231	-0.117	3.75 0.089	-0.200-0.277 0.2 5	066-0.053 0.001 0.018 0.073	
19.35 0.461 20.35 0.485	0.111 0.065	-0.214	-0.210	2.75 0.066		83-0.074 0.016 0.014-0.041	
22.35 0.533	0.003	-0.152	-0.107	1.75 0.042		78-0.012 0.022 0.075 0.151	
23.35 0.556	0.126	-0.094	-0.152	0.75 0.018	-0. 1	15-0.057 0.079 0.042 0.057	
24.35 0.580	0.192	-0.230 -0.156	-0.141	-0.25-0.006	_	0.101 0.166 0.004	
25.35 0.604	0.029	-0.128	-0.096	-1.25-0.030		43 0.130 0.116 0.083 0.070	
26.35 0.628		-0.167	-0.035	-2.25-0.054		72 0.134 0.195 0.195 0.080	
27.35 0.652	0.098	-0.156	0.044	-2.75-0.066	0.177 0.192	15 0.170 0.036 0.036 0.120	
30.35 0.723	0.440	0.115 0.066 0.050	-0.066	-3.25 - 0.077 - 4 .25-0.101		28 0.216 0.131 0.131 0.177	
31.35 0 747	0.143	-0.115 -0.066-0.059 -0.053 0.002	-0.1 4 6-0.087	-5.25-0.125		63 0.055 0.085 0.085 0.025	
32.35 0.771 33.35 0.795	0.193 0.257		-0.042-0.035	-6.25-0.149			
34.35 0.818	0.094		-0.087 0.030	-9.25-0.220			
35.35 0.842			-0.077-0.140	-12.25-0.292	0.184 0.087 0.1	29 0.096	
36.35 0.866	0.130		-0.016-0.020	-15.25-0.363	0.131 0.0	0.131	
37.35 0.890	0.121	-0.027 0.019	0.049-0.057				
38.35 0.914	0.155	- ·	-0.097-0.038				
39.35 0.938	0.207 0.00		0.003 0.008				
40.35 0.961	0.036 0.02		-0.021 0.062 -0.006-0.093				
41.35 0.958			0.049-0.027				
42.35 1.009 44.85 1.069			0.112-0.023				
45 .85 1.092		•	3,				
46.85 1.116	0.162 0.04						
<u> </u>							

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER. MOFFETT FIELD. CALIF. PRELIMINARY DATA

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RUN SEQ 265 1

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MACH RN/L RN PT P TTR Q ALPHA CONF WING COEFFICIENTS 0.498 3.009 6.85 2064 1742 530.1 302.0 5.00 28 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF 0.406 0.092 0.498-0.0136-0.0091-0.0227 0.2117 28.35 34.81 29.55 42.49 0.000 0.00

		1 .	ITNIC SEC	TION COE	FETCIE	NITC							WIN	G UPPER	SURFACE	COEFFICI	ENTS
2V 7D	CARIC	_			MLS		YCDUS	XCPLS	YCPS	CNC/	CMC/	2Y/B		0.296	0.500	0.697	0.894
2Y/B	CNUS	CNLS	CNS	C105 C	.TL3	0470	24 40	A1 70	24 AQ			X/C	0.577	0.270	0.500		
0.099	0.333	6.033	0.432-0	.0313-0.	0100-0	.04/9	34.40	41,70	30.07	0.017	0.101		0 201	0.010	-0.197	-0.275	-0.056
0 296	0.398	0.105	0.502 - 0	.0236-0.	0205-0	.0441	30.94	44.60	33.78	0.013	0.014	0	0.201	-0.019		-0.2/3	-0.050
0.500	0.453	0.106	0.559 - 0	.0259-0.	0203-0	.0461	30.71	44.15	33.26	0.558-	0.093	0.003			-0.741		
0.697	0.497	0.090	0.587 - 0	.0349-0.	0186 - 0	.0535	32.02	45.69	34.11	0.462 -	0.131	0.006			-1.014	-1.013	0.044
0.894	0.499	0.030	0.529-0	.0540-0.	0081 - 0	.0620	35.81	52.24	36.73	0.304 -	0.100	0.01	-0.623	-1.067	-1.290	-1.272	-0.914
												0.02	-0.872	-1.300	-1.476	-1.392	-1.005
	UINE	LOWER	SURFAC	E COEFFI	CIENTS							0.03	-0.868	-1.275	-1.410	-1.361	-0.990
2Y/B		0.296				894						0.04	-0.803	-1,208	-1.308	-1,281	-0.923
	0.077	0.2 /	0.50	0.0		O 7-4						0.05	-0.764	-1.062	-1.196	-1.229	-0.952
X/C	0 E14	O 514	0.51	6 0.51	6 0	516						0.06	-0.728	-0.988	-1,100	-1.076	-0.834
0	0.516	0.516			0 0.	210						0.08	-0.661	-0.910	-0.979	-0.996	-0.821
0.01			0.45								,	0.10	-0.621	-0.838	-0.921	-0.936	-0.788
0.02			0.40											-0.762	-0.847	-0.870	-0.778
0.03			0.33									0.125	-0.576	_	•		-0.753
0.04			0.30									0.15	-0.540	-0.681	-0.780	-0.824	
0.05	0.228	0.253	3 0.29	4 0.24	12 0.	154						0.175	-0.512	-0.610	-0.721	-0.782	-0.723
0.10	0.175	0.164	0.15	6 0.14	17 0.	064						0.20	-0.477	-0.589	-0.675	-0.744	-0.717
0.15	0.118	0.107	0.11	2 - 0.09	93 0.	038						0.225	-0.440	-0.549	-0.625	-0.701	-0.722
0.20	0.099	0.087	0.09	9 0.06	0 -0.	009						0.25	-0.436	-0.514	-0.608	-0.680	-0.717
0.30	0.065	0.053			0.	056						0.30	-0.410	-0.472	-0.564	-0.652	-0.729
0.40	0.041	0.048				072						0.35	-0.380	-0.432	-0.506	-0.617	-0.683
0.50	0.023	0.016				076						0.40	-0.363	-0.391	-0.475	-0.570	-0.629
0.55	0.020	0.010	. ,,	. 0.00	,,							0.45	-0.333	-0.381	-0.437	-0.515	-0.578
_	0.061	0.054	0.06	2 0.03	38 -0.	007						0.50	-0.307	-0.346	-0.380	-0.463	-0.524
0.60	0.061	0.056			. O.	007						0.55	-0.294	-0.317	-0.355	-0.422	-0.461
0.65	0 111	0 13/	0.11		0 0	007						0.60	-0.286	-0.290	-0.333	-0.386	-0.427
0.70	0.111	0.124			_	097							-0.255	-0.257	-0.298	-0.325	-0.371
0.75	0.125	0.157				108						0.65	<u>=</u>				
0.80	0.136	0.162				107						0.70	-0.233	-0.219	-0.265	-0.290	-0.317
0.85	0.133	0.173			_	106						0.75	-0.199	-0.212		-0.238	-0.277
0.90	0.101	0.122	0.12	1 0.12		094						0.80	-0.162			-0.206	-0.235
0.95	0.069	0.072	0.09	5 0.08	32 0.	062						0.85	-0.144	-0.132	-0.141	-0.153	-0.175
1.00	-0.012	0.019		4 - 0.01	18 -0.	054						0.9Ú	-0.093	-0.087	-0.090	-0.100	-0.152
	- · -	• –										0.95	-0.043	-0.025	-0.032	-0.029	-0.101
												1.00	-0.012	0.019	0.004	-0.018	-0.054
												. – –			-		

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

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ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y Y/CR	CHORDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .013	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 16.35 0.366 16.35 0.366 16.35 0.413 18.35 0.437 19.35 0.461 20.35 0.556 24.35 0.580 25.35 0.580 25.35 0.604 26.35 0.604 26.35 0.604 26.35 0.604 26.35 0.723 31.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 33.35 0.747 32.35 0.795 34.35 0.866 37.35 0.866 37.35 0.866 37.35 0.866 37.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.958 42.35 1.069 44.85 1.069 45.85 1.069 46.85 1.116	0.044 0.078 0.085 0.126 0.177 0.023 0.111 0.065 0.076 0.126 0.192 0.029 0.131 0.098 0.143 -0.1 0.193 -0.0 0.257 0.0 0.094 -0.1 0.195 -0.0 0.195 -0.0 0.130 -0.0 0.155 0.0 0.155 0.0 0.155 0.0 0.155 0.0 0.207 0.007 0.1 0.036 0.029-0.0 0.116 0.101 0.0 0.083 0.166 0.0 0.070 0.004 0.0 0.120 0.090 0.0	53 0.002 -0.146-0.087 04 -0.150 -0.042-0.035 35 -0.042 -0.087 0.030 33 -0.074 -0.077-0.140 57 -0.053 -0.016-0.020 27 0.019 0.049-0.057 34 0.069 -0.097-0.038 06 -0.065 0.003 0.008 37 0.036 -0.021 0.062 79 0.001 -0.006-0.093 42 0.018 0.049-0.027 57 0.073 0.112-0.023	Y Y'CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 -0.163-0.141-0.087-0.020-0.093-0.027 7.75 0.185 -0.167-0.247-0.156-0.059 0.036-0.076 -0.010 6.75 0.161 5.75 0.137 -0.244-0.120-0.182-0.100-0.014 0.093 0.045-0.001 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.042 -0.163-0.176-0.059 0.036-0.076 -0.010 0.083-0.074 0.016 0.018 0.073 -0.268-0.279-0.230 0.083-0.074 0.016 0.018 0.073 -0.25-0.006 -1.25-0.030 -0.178-0.012 0.022 0.075 0.151 0.75 0.018 -0.115-0.057 0.079 0.042 0.057 -0.25-0.006 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 0.042 0.070 0.023 0.128 0.216 0.131 0.131 0.177 -5.25-0.125 -6.25-0.149 0.131 0.085 0.131 0.214 0.154 0.098 0.010 -9.25-0.220 0.131 0.085 0.131 0.214 0.154 0.098 0.010 -9.25-0.220 0.131 0.076 0.040 0.085 0.148 -0.131 0.083 0.131

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

0.85

0.95

1.00

-0.020

-0.157 -0.147 -0.146 -0.158

0.90 -0.104 -0.102 -0.098 -0.099 -0.139

-0.051 -0.037 -0.034 -0.038 -0.111

0.009 0.000 -0.006 - .052

-0.178

RUN SEQ 266 1

WING COEFFICIENTS Q ALPHA CONF TTR MACH RN/L TAU XCPU 28 CNU CNL CN XCPL XCP CML CB 6,92 1926 1429 534.0 362.8 5.00 CMU CM 0.602 3.042 0.430 0.085 0.515-0.0161-0.0091-0.0252 0.2190 28.73 35.72 29.89 42.52 0.00G 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 2Y/B 0.099 0.296 0.500 0.697 CNC/ CMC/ CMS XCPUS XCPLS XCPS CMLS **CMUS** CNUS CNLS CNS 2Y/B 0.354 0.091 0.445-0.0369-0.0149-0.0518 35.42 41.35 36 63 0.638 0.162 X/C 0.099 -0.095-0.0120.426 0.092 0.518-0.0281-0.0188-0.0469 31.60 45.55 34.07 0.631 0.013 0.250 -0.168 0.079 0 0,296 0.003 -0.6400.481 0.099 0.580-0.0288-0.0206-0.0494 30.99 45.68 33.51 0.580-0.099 0.500 -0.923-0.965 0.521 0.086 0.607-0.0366-0.0187-0.0553 32.02 46.84 34.12 0.478-0.136 0.006 0:697 -1.242-1.2680.517 0.030 0.546-0.0543-0.0090-0.0634 35.52 55.20 36.60 0.314-0.103 0.01 -0.904-0.580 -1.036-1.359 -1.540 -1.476-1.0200.02 -0.829 -1.347 -1.524-1.022-0.86b -1.4410.03 WING LOWER SURFACE COEFFICIENTS -1.243 -1.421 -0.986-1.3690.04 -0.8130.099 0.296 0.697 0.894 0.500 2Y/B 0.05 -0.789 -1.108 -1,288 -1.348-1.002X/C -0.736· -1.035 -1.169 -1,127 -0.882 0.060.523 0.523 0.523 0.523 0 -1.037-0.957 -1.040 0.08 -0.847-0.6770.452 0.01 -0.871-0.9790.10 -0.982-0.824-0.6410.388 0.02 -0.788-0.887-0.8000.125 -0.590-0.9150.329 0.03 -0.731-0.7800.15 -0.552 -0.822-0.863 0.289 0.04 -0.7660.175 -0.533 -0.664-0.814-0.7600.288 0.239 0.247 Q.138 0.226 0.05 0.20 -0.512-0.622 -0.722-0.784-0.767 **①.143** 0.147 0.144 0.0780.158 0.10 0.225 -0.478-0.583 -0.677-0.747-0.7520.026 0.097 0.080 0.15 0.114 0.101 -0.5550.25 -0.724-0.751-0.646-0.467-0.0070.20 0.054 0.090 0.0720.075 -0.512-0.4390.30 -0.591-0.690-0.7680.30 -0.0650.059 0.024 0.031 0.018 0.35 -0.405 -0.472-0.726-0.529-0.644-0.0040.028 0.013 0.005 -0.0720.40 0.40 -0.495-0.584-0.387-0.427-0.6650.003 -0.0130.008 -0.003-0.0710.50 0.45 -0.372-0.466-0.539-0.403 -0.6000.55 0.50 -0.344-0.491-0.380-0.426 -0.536-0.0110.046 0.057 0.043 0.038 0.60 -0.342-0.393 -0.471-0.328-0.4480.55 0.102 0.65 -0.3570.60 -0.323-0.400-0.305-0.4260.70 0.106 0.128 0.128 0.085 0.134 0.65 -0.273-0.313-0.346-0.283 -0.378 :0.125 0.75 0.143 0.166 0.151 0.108 0.70 -0.255 -0.246-0.279 -0.303-0.3170.173 0.80 0.1440.163 0.163 0.123 -0.232 -0.220 -0.228 0.75 -0.259-0.2790.137 0.153 0.126 0.85 0.162 0.160 0.80 -0.192-0.195 -0.192 -0.208 -0.2340.134 0.128 0.102 0.096 0.120 0.90

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

0.95 0.060 0.076 0.091 0.087 0.058

1.00 -0.020 0.009 0.000 -0.006 -0.052

ID-PRESSOUTO

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TST-356 PH-1 TN-66 266.1

ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHC	ORDWISE ROWS			NORMAL ROWS	
ROW ID	1A 1B 2	3 4A 4B 5A	5B 6	ROW ID X	A B C D E F G 12,35 17,35 24,35 31,35 36,35 41,35 42,35 4	H 44 85
Y Y/CR	-2.75 -1.25 -0.2 06603000		6.75 10.75 .161 .256		0.294 0.413 0.580 0.747 0.866 0.985 1.009	
				V V/CD		
X X/CR 10.35 0.247		-0.328		Y Y/CR 16,75 0,399		
11.35 0.270		-0.234		13.75 0.328	-0.113-0.074 0.013-0.120	
12.35 0.294		-0.268 -0.167		10.75 0.256		-0.010
14,35 0,342 15,35 0,366		-0.2 4 9 -0.197	-0.120	6.75 0.161		
16,35 0,390		-0.143	-5.545	5.75 0.137	' -0.244-0.120-0.182-0.100-0.014	-0.001
17.35 0.413	0.177	-0.279 -0.247	-0.163	4.75 0.113		0.066
18.35 0.437		-0.191 -0.231	-0.117 -0.061	3.75 0.089	-0.268-0.279-0.230 -0.066-0.053	0.073
19,35 0,461 20,35 0,485	- · ·	-0.214	-0.210	2.75 0.066	-0.083-0.074 0.016 0.014	-0.041
22.35 0.533	– • – –	-0.152	-0.107	1.75 0.042		
23.35 0.556		-0.094 0.330 0.156	-0.152 -0.141	0.75 0.018 -0.25-0.006		
24.35 0.580 25.35 0.604		-0.230 -0.156 -0.128	-0.141	-1.25-0.030		
26.35 0.628		-0.167	-0.035	-2.25-0.054	0.172 0.134 0.195 0.195	0.080
27.35 0.652		-0.156	0.064	-2.75-0.066		0.120
30.35 0.723 31.35 0.747		-0.115 -0.066-0.059-	-0.066 -0.069 -0	-3.25-0.077 -4.25-0.101		
32,35 0.771			-0.146-0.087	-5.25-0.125	0.163 0.055 0.085 0.085	0.025
33.35 0.795	0.257		-0.042-0.035	-6.25-0.149		0.010
34.35 0.818			-0.087 0.030 -0.077-0.1 4 0	-9.25-0.220 -12.25-0.292		
35.35 0.842 36.35 0.866			-0.016-0.020	-15.25-0.363		
37.35 0.890	0.121	-0.027 0.019	0.049-0.057			
38.35 0.914			-0.097-0.033			
39.35 0.938 40.35 0.961		007 0.106 -0.065 029-0.037 0.036 -	0.003 0.008 -0.021 0.062			
41.35 0.958	_		-0.006-0.093			
42.35 1.009		166 0.042 0.018	0.049-0.027			
44.85 1.069 45.85 1.092		004 0.057	0.112-0.023			
46.85 1.116		042 0.158				~-*

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD. CALIF. PRELIMINARY DATA RUN: SEQ 267:1

WING COEFFICIENTS Q ALPHA CONF P TTR MACH RN/L CB XCPU XCPL XCP 6.89 1662 1200 537.2 409.6 5.00 28 CNU CNL CN CMU CM 0.698 3.027 0.476 0.070 0.546-0.0204-0.0077-0.0281 0.2322 29.29 35.99 30.15 42.53 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 2Y/B 0.099 CMS XCPUS XCPLS XCPS CNC/ CMC/ 0.500 0.697 0.296 CNUS CNLS CNS CMUS CMLS 2Y/B 0.397 0.076 0.473-0.0468-0.0120-0.0588 36.79 40.79 37.44 0.678 0.164 X/C 0.027 - 0.059 0.471 0.076 0.548-0.0349-0.0159-0.0508 32.41 45.73 34.27 0.668 0.012 0.024 0 0.320 0.170 -0.4800.531 0.083 0.614-0.0328-0.0185-0.0513 31.17-47.29 33.35 0.614-0.103 0.003 0.500 -0.7960.571 0.073 0.643-0.0400-0.0179-0.0579 32.00 49.70 34.00 0.506-0.143 -0.746300.0 0.697 -1.0610.571 0.011 0.583-0.0597-0.0064-0.0661 35.45 80.59 36.34 0.335-0.109 0.01 -1.128-0.916-0.502 -0.885 -1,288 0.02 -1:446 -0.803 -1.426 -1.106-1,462 -1,623 0.03 -1.578 -0.867 -1.124WING LOWER SURFACE COEFFICIENTS -0.824-1.371 -1.637 -1.606-1.0770.04 0.296 0.500 0.697 0.0992Y/B -1.392 -1.711-1.664-1.208-0.8010.05 X/C -1.136 -1.691 -0.764-1.655 -0.9690.060.531 0.531 0.531 0.531 0 0.08 -1.047 - 1.087-1.045 -0.942-0.7110.431 0.01 0.10 -0.676**-0.951 -1.038** -0.989 -0.925 0.354 0.02 0.125 -0.632 -0.873 -C.956 -0.959-0.963 0.304 0.03 0.15 -0.926-0.891-0.614==-0.793 -0.887 0.267 0.04 C.175 -0.583 -0.730 -0.820-0.882-0.8700.217 0.122 0.050.214 0.219 0.261-0.570-0.783-0.8670.20 -0.847-0.6910.045 0.119 0.10 0.136 0.123 0.127 -0.5440.225 -0.851-0.643-0.733-0.811 0.076 0.057 - 0.0080.15 0.074 0.0% 0.25 -0.607 -0.527-0.790-0.704-0.842-0.0400.20 0.029 0.070 0.055 0.048 0.30 -0.505-0.569 -0.651 -0.763-0.8640.30 -0.0870.007 -0.008 0.011 0.040 -0.513 -0.601 0.35 -0.724-0.466-0.805-0.026-0.096-0.0110.014 -0.0040.40 -0.494-0.567 -0.733-0.4480.40 -0.650 -0.016-0.0890.50 -0.020-0.017-0.027-0.452 -0.5220.45 -0.654-0.427-0.6010.55 0.50 -0.574-0.426-0.469-0.542-0.036 -0.4050.60 0.0250.034 0.039 0.025 0.55 -0.294 -0.390-0.429-0.490-0.5040.088 0.65 -0.3600.60-0.346-0.389-0.436-0.4520.130 0.124 0.099 0.0710.113 0.70 -0.314-0.328 -0.352 -0.376-0.4020.65 0.122 0.140 0.150 0.151 0.104 0.75 0.70 -0.295-0.281-0.3!0-0.321-0.3340.114 0.80 0.131 0.153 0.165 0.159 -0.252 0.75 -0.269-0.258 -0.276-0.3010.152 0.123 0.85 9.120 0.152 0.161 0.80 -0.233-0.221-0.221-0.226-0.2610.098 0.90 0.093 0.124 0.114 0.124 -0.192 -0.169 -0.167 0.85 -0.172-0.2140.081 0.050 0.050 0.0640.95 0.089 0.90 -0.128-0.111 < -0.102-0.106-0.172-0.004 -0.002 -0.003 -0.0641.00 -0.027 -0.972 -0.055 -0.042 -0.045 -0.127-0.027 -0.004 -0.002 -0.003 -0.064 1.00

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

•	CHORDWISE	ROWS			NORMAL ROWS
ROW ID	1A 1B 2 3	4A 4B 5A	5B 6	ROW ID	A B C D E F G H
Y	-2.75 -1.25 -0.25 0.79		6.75 10.75	X	12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y/CR -	066030006018	8 .101 .089 .185	:161 .256	X/CR	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR				v	
10.35 0.247	0.093	-0.328		Y Y/CR	0.053.0.470.040
11.35 0.270		-0.234		16.75 0.399	
12,35 0,294		-0.268 -0.167		13.75 0.328 10.75 0.256	
14,35 0.342	0.078	-0.249	-		-0.163-0.141-0.087-0.020-0.093-0.027 -0.167-0.247-0.156-0.059 0.036-0.076 -0.010
	0.085	-0.197	-0.120	6.75 0.161	-0.009-0.016-0.006 0.049 0.112
16,35 0,390	0.126	-0.143	-5.545		-0.244-0.120-0.182-0.100-0.014 6.093 0.045-0.001
17.35 0.413	0.177	-0.279 -0.247	-0.163	4.75 0.113	-0.115-0.055 0.047 0.016 0.066
18,35 0,437	0.023	-0.191	-0.117	4.25 0.101	-0.268-0.279-0.230
19,35 0,461	0.111	-0.231	-0.061	3.75 0.089	-0.066-0.053 0.001 0.018 0.073
20,35 0,485 22,35 0,533	0.065 0.076	-0.214	-0.210	2.75 0.066	
23.35 0.556	0.076	-0.152 -0.09 4	-0.107	1.75 0.042	-0.178-0.012 0.022 0.075 0.151
24,35 0.580	0.192	-0.230 -0.156	-0.152 -0.141	0.75 0.018	-0.115-0.057 0.079 0.042 0.057
25,35 0.604	0.029	-0.128	-0.096	-0.25-0.006 -1.25-0.030	0.101 0.166 0.004
26,35 0,628	0.131	-0.167	-0.035	-2.25-0.054	0.143 0.130 0.116 0.083 0.070
27.35 0.652	0.098	-0.156	0.003	-2.75-0.066	0.172
30.35 0.723			-0.066	-3.25-0.077	0.115 0.170 0.036 0.036 0.120
31,35 0.747	0.143 -0.11	15 -0.066-0.059-0		-4.25-0.101	0.042 0.070 0.023 0.128 0.216 0.131 0.131 0.177
32.35 0.771	0.193 -0.05	53 0.002 -	0.146-0.087	-5.25-0.125	0.163 0.055 0.085 0.085 0.025
33,35 0.795	0.257 0.00		0.042-0.035	-6.25-0.149	0.131 0.085 0.131 0.214 0.154 0.098 0.010
34,35 0,818 35,35 0,842	0.094 -0.13		0.087 0.030	-9.25-0.220	0.131 0.076 0.040 0.085 0.148
36,35 0.866	0.195 -0.03 0.130 -0.05		0.077-0.140	-12.25-0.292	0.184 0.087 0.129 0.096
37.35 0.890	0.130 -0.05 0.121 -0.02		0.016-0.020	-15.25-0.363	0.131 0.083 0.131
38.35 0.914	0.155 0.03		0.0 49- 0.057 0.097-0.038		
39.35 0.938	0.207 0.007 0.10		0.003 0.003		
40.35 0.961	0.036 0.029-0.03		0.021 0.062		
41.35 0.958	0.116 0.101 0.07		0.006-0.093		
42.35 1.009	0.083 0.166 0.04	12 0.018 (0.049-0.027		
44.85 1.069	0.070 0.004 0.05	57 0.073 (0.112-0.023		
45.85 1.092	0.120 0.090 0.09				
46.85 1.116	0.162 0.042 0.15	ා ර්			

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

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RUN SEQ 268 1

MACH 0.821	-	RN PT 4.55 100			ALPHA 0	28 CNU					_	DEFFICIEN CB 3 0.2796	XCPU)	CPL XCP 14.2 33.3		TAU 0.000 0	CF 0.00
2Y/B 0.099 0.296 0.500 0.697 0.894	0.629 0.715 0.811 0.801	CNLS 0.021 0 0.017 0 0.007 0 -0.008 0 -0.104 0	CNS CI .549-0. .646-0. .722-0. .803-0. .698-0.	0765-0.00 0668-0.00 0793-0.00 1227 0.02	S CMS)33-0.0894)42-0.0807)59-0.0728)26-0.0819 211-0.1016	42.57 37.16 34.35 34.77	9.272 49.26 108.9 -8.024	41.30 37.49 35.09 35.20	0.788 0.721 0.632	0.146 -0.017 -0.134 -0.185	X/C 0 0.003 0.006 0.01 0.02	0.390 -0.335 -0.634	0.323 -0.550 -0.909	0.500 0.225 -0.186 -0.409 -0.664 -0.989	0.697 0.162 -0.443 -0.695 -0.971	0.894 0.164 -0.638 -0.866	
0.50 0.55	0.099 0.544 0.176 0.092 0.051 0.025 -0.017 -0.053 -0.089 -0.057 0.034	0.296 0.544 0.150 0.067 0.016 -0.016 -0.069 -0.082 -0.113	0.500 0.544 0.335 0.257 0.206 0.175 0.112 0.037 -0.002 -0.037 -0.083 -0.098 -0.099 -0.040 0.013 0.060	0.102 0.004 -0.055 -0.101 -0.116 -0.128 -0.046	0.894 0.544 -0.008 -0.093 -0.139 -0.166 -0.214 -0.225 -0.215						0.03 0.04 0.05 0.06 0.08 0.125 0.15 0.175 0.20 0.225 0.25 0.30 0.35 0.40 0.45 0.50	-0.741 -0.729 -0.749 -0.704 -0.690 -0.661 -0.633 -0.638 -0.629 -0.628 -0.626 -0.613 -0.617 -0.622 -0.647 -0.659 -0.665	-1.097 -1.150 -1.238 -1.237 -1.209 -1.172 -0.949 -0.932 -0.900 -0.840 -0.798 -0.774 -0.747 -0.747 -0.747 -0.747 -0.743 -0.746	-1.153 -1.202 -1.280 -1.326 -1.328 -1.333 -1.333 -1.333 -1.332 -1.316 -1.107 -0.954 -0.883 -0.865 -0.882 -0.883 -0.860	-1.117 -1.176 -1.238 -1.276 -1.277 -1.300 -1.318 -1.333 -1.335 -1.335 -1.349 -1.349 -1.349 -1.323 -1.221 -1.041 -0.991 -0.919	-0.949 -0.936 -1.065 -1.070 -1.088 -1.123 -1.131 -1.146 -1.161 -1.190 -1.219 -1.236 -1.290 -1.304 -0.817 -0.785 -0.765 -0.742	
0.75 0.80 0.85 0.90 0.95	0.079 0.082 0.071 0.043 -0.007 -0.067	0.107 0.120 0.112 0.075 0.028 -0.044	0.117 0.131 0.123 0.078 0.025 -0.032	0.088 0.114 0.105 0.073 0.035	0.020 0.039 0.036 -0.005 -0.080 -0.287	:					0.60 0.65 0.70 0.75 0.80 0.85 0.90 0.95	-0.634 -0.607 -0.609 -0.464 -0.356 -0.273 -0.186 -0.110 -0.067	-0.560 -0.473 -0.343 -0.273 -0.206 -0.147 -0.097	-0.730 -0.568 -0.385 -0.264 -0.210 -0.179 -0.126 -0.063 -0.032	-0.597 -0.492 -0.377 -0.295 -0.255 -0.209 -0.158 -0.096 -0.073	-0.699 -0.625 -0.599 -0.568 -0.550 -0.422 -0.383 -0.317 -0.287	e E

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

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ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y Y/CR	CHORDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .018	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.628 27.35 0.652 30.35 0.723 31.35 0.747 32.35 0.771 33.35 0.771 33.35 0.771 33.35 0.795 34.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.958 42.35 1.009 44.85 1.069 45.85 1.092 46.85 1.116	0.093 0.044 0.078 0.085 0.126 0.177 0.023 0.111 0.065 0.076 0.126 0.192 0.029 0.131 0.098 0.143 -0.11 0.193 -0.05 0.257 0.00 0.257 0.00 0.195 -0.03 0.195 -0.03 0.121 -0.02 0.155 0.03 0.121 -0.02 0.155 0.03 0.207 0.007 0.10 0.036 0.029-0.03 0.116 0.101 0.07 0.083 0.166 0.04 0.070 0.004 0.05 0.120 0.090 0.09 0.120 0.090 0.09 0.162 0.042 0.15	053 0.002 -0.146-0.087 04 -0.150 -0.042-0.035 35 -0.042 -0.087 0.030 33 -0.074 -0.077-0.140 57 -0.053 -0.016-0.020 27 0.019 0.049-0.057 34 0.069 -0.097-0.038 06 -0.065 0.003 0.008 37 0.036 -0.021 0.062 79 0.001 -0.006-0.093 042 0.018 0.049-0.027 057 0.073 0.112-0.023	Y Y/CR 16.75 0.399 13.75 0.328

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD. CALIF. PRELIMINARY DATA RUN SEQ 269 1

MACH RN/L RN PT P TTR Q ALPHA CONF WING COEFFICIENTS
0.821 3.010 6.85 1533 985 542.5 464.3 5.00 28 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF
0.648 0.001 0.648-0.0645 0.0072-0.0573 0.2766 34.96-951.1 33.84 42.66 0.000 0.00

		1.	TMC SECT	ION COEFF	TOTENTS							WIN	G UPPER	SURFACE	COEFFICI	ENTS
2Y/B	CNUS			MUS CML		XCPUS	XCPLS	XCPS	CNC/	CMC/	2Y/B		0.296	0.500	0.697	0.894
0.099	0 529	0.033		0955 0.00							X/C					
	0.520	0.032	0.337-0.	0831-0.00	20_0.0250	38 15	30 26	38 17	0.788-	-0 024	0	0.405	0.329	0.235	0.779	0.185
0.296	0.032	0.014	0.040-0.	0717-0.00	20-0.0050 41-0.0758	35 08	05 23	35.57	0.700	-0.022	0.003	0,03	000-	-0.172		
0.500	0.711	0.000	0.717-0.	0992 0.00	41-0.0730 10-0 0073	36.00	33 83	37.00	0.717	-0.196	0.006			-0.396	-0.430	
0.697	0.832	-0.021	0.011-0.	1267 0.02	FO 0 1017	41 4C	15.02	40.67	0.030	-0.170	0.00	-0.320	-0.544	-0.650	-0.682	-0.611
0.894	0.763	-0.114	0.649-0.	1267 0.02	50-0.1017	41.00	40.07	40.07	0.373	-0.131	0.02	-0.627	-0.908	-0.980	-0.956	-0.836
	VITEM			COCCETA	ENTC						0.03	-0.731	-1.093	-1.147	-1.105	-0.928
2V (D				COEFFICI							0.04	-0.710	-1.134	-1,193	-1.155	-0.898
2Y/B	0.099	0.296	0.500	0.697	0.894						0.05	-0.722	-1.230	-1.276	-1.228	-1.046
Χ/C	0.544	0 544	0 544	OFAA	O EAA						0.06	-0.708	-1.209	-1.312	-1.266	-1,043
0	0.544	0.544			0.544						0.08	-0.676	-1,181	-1,301	-1.268	-1.067
0.01			0.336			•					0.10	-0.652	-1.108	-1.320	-1.276	-1.084
0.02			0.258								0.125	-0.633	-0.933	-1.307	-1,291	-1.099
0.03			0.205								0.15	-0.622	-0.916	-1.326	-1.300	-1,112
0.04	0 177	0 144	0.178		-0.035						0.175	-0.618	-0.870	-1.316	-1.314	-1.133
0.05	0.177	0.146			-0.035 -0.078						0.20	-0.621	-0.832	-1.261	-1.315	-1.164
0.10	0.108	0.059			-0.078						0.225	-0.613	-0.788	-1.014	-1.321	-1,189
0.15	0.066	0.011			-0.159						0.25	-0.613	-0.749	-0.934	-1.317	-1.206
0.20	0.033	-0.017			-0.137						0.30	-0.608	-0.723	-0.868	-1.333	-1.245
0.30	-0.011	-0.055			-0.242						0.35	-0.611	-0.725	-0.851	-1.331	-0.736
0.40	-0.039	-0.076		_	-0.226						0.40	-0.618	-0.727	z-0.863	-1.067	-0.705
0.50	-0.058	-0.095	5 -0.120	0.142	-0.220						0.45	-0.635	-0.729	-0.862		-0.710
0.55	0 022	0.040	0 020	_0_060	-0.137						0.50	-0.643	-0.722	-0.853	-0.881	-0.712
0.60	-0.033	-0.060	0.030 0.029		-0.137						0.55	-0.655	-0.731	-0.850		-0.707
0.65	0.040	0.050			-0.025						0.60	-0.657	-0.729	-0.775	-0.696	-0.694
0.70	0.049	0.059			0.005						0.65	-0.625	-0.721	-0.568		-0.688
0.75	0.072	0.102			0.039						0.70	-0.613	-0.578	-0.326	-0.593	-0.643
0.80	0.085	0.114			0.029						0.75	-0.510	-0.430		-0.447	-0.607
0.85	0.085	0.111	_ _		-0.009						0.80	-0.377	-0.280	-0.252		-0.498
0.90	0.038	0.062			-0.009						0.85	-0.269	-0.227	-0.208		-0.427
0.95	-0.007 -0.073	0.015			-0.113						0.90	-0.187	-0.158	-0.165		-0.411
1.00	-0.072	-0.045	-0.050	J -0.07/	-0.303						0.95	-0.119	-0.093	-0.099		-0.439
											1.00	-0.072	-0.049			-0.383
												0.072	0.047	0.050	0.077	

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

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ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

		CHORDI	WISE R	ROWS						_		NORMAL		ā .	_	ís.	• •
ROW ID		B 2	3	4A	4B	5A	5B	6	ROW ID X	A 12.25	. B	24 35	31 36 D	E 5 36.35	F ⊿1 35 ∠	G 42 35 .	H 44 85
Y Y/CR	-2.75 -1. 0660		.018	4.25 .101	3.75 .089	7,75 ,185	0,75 ,161	10.75 .256	x/cr	0.294	0.413	0.580	0.74	0.866	0.985	1.009	1.069
17CR	0000	30 -,000	.010	.101	.007	. 105	,	,230	,,, .	0,27							
X X/CR				0 220					Y Y/CR			_0_05	2_0_1°	76-0.018	<u>'</u>		
10.35 0.247	0.093			-0.328 -0.234					16.75 0.399 13.75 0.328		-0 11			3-0.120			
11.35 0.270 12.35 0.294	0.044			-0.263		-0.167			10.75 0.256		-0.16	3-0.14	1-0.08	37-0.020	-0.093		
14,35 0,342	0.078			-0.249					7.75 0.185		-0.24	7-0.15	6-0.0	9 0.036	-0.076	0.040	-0.010
15,35 0,366	0.085			-0.197				-0.120	6.75 0.161	0.044		0 0 10	-0.00	9-0.016	-0.006	0.049	U.112 -0 001
16.35 0.390				-0.143		-0.247		-5.545 -0.163	5.75 0.137 4.75 0.113		-0.12	0-0.10	2-0.10 -0.11	5-0.055	0.093	0.045	0.066
17.35 0.413 18.35 0.437	0.177 0.023			-0.279 -0.191		-0.247		-0.103	4.25 0.101		-0.27	9-0.23			0.047	0.0.0	0.000
19,35 0,461	0.023			-0.231				-0.061	3.75 0.089				-0.00	6-0.053			
20.35 0.485	0.065			-0.214				-0.210	2.75 0.066					33-0.074			
22.35 0.533				-0.152				-0.107	1.75 0.042 0.75 0.018					78-0.012 15-0.057			
23,35 0,556 24,35 0,580	0.126 0.192			-0.094 -0.230		-0.156		-0.152 -0.141	-0.25-0.006		<i>\$</i>		-0.1	0.057			0.004
25.35 0:604	0.029			-0.128		050		-0.096	-1.25-0.030		_			13 0.130			
26.35 0.628	0.131			-0.167				-0.035	-2.25-0.054			-		72 0.134	0.195	0.195	0.080
27.35 0.652	0.098			-0.156				0.044	-2.75-0.066		0.17	7 0.19		5 0.170	0 036	0 036	0 120
30.35 0.723	0	143	-0.115		_0_066.	-0 059		-0.066 9-0.100	-3.25-0.077 -4.25-0.101		0 07	n n n2		28 0.216			
31.35 0.747 32.35 0.771			-0.053		0.002			6-0.087	-5.25-0.125		. 0.07	0.02	0.10	3 0.055	0.085	0.085	0.025
33.35 0.795		257	0.004		-0.150		-0.04	2-0.035	-6.25-0.149	0.131							0.010
34.35 0.618			-0.135		-0.042			7 0.030						10 0.085			
35.35 0.842		_	-0.033		-0.074			7-0.140 6-0.020			0.18			29 0.096 33 0.131			
36.35 0.866 37.35 0.890			-0.057 -0.027		-0.053 0.019			9-0.057	-15.25-0.303	•		0.15	0.0	0.75			
38.35 0.914	·	155	0.034		0.069			7-0.038									
39.35 0.938	0.	207 0.007	-		-0.065			3 0.008									
40.35 0.961		036 0.029			0.036			1 0.062									
41.35 0.958 42.35 1.009	_	116 0.101 083 0.166			0.001 0.018		=	6-0.093 9-0.027									
44.85 1.069	_ ~	070 0.004			0.073			2-0.023									
45.85 1.092	0.	120 0.090	0.090)				:									
46.85 1.116	0.	162 0.042	0.158	3													
	NIA TT CAIAI	ACDOMALITE	CC ANIC) CDACE	ADMIN	TCTDAT	TON										

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER: MOFFETT FIELD. CALIF. PRELIMINARY DATA

TST-356 PH-1 TN-66 269.1

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LINE COUNT =

905

RUN SEQ 165+3

WING COEFFICIENTS

CM CB XCF Q ALPHA CONF MACH RN/L RN PT P TTR Q ALPHA CONF 0.820 2.986 6.79 1505 968 538.1 455.4 5.00 17 CNU CNL CN CMU CML CM XCPU XCPL XCP 0.440 0.083 0.523-0.0206-0.0131-0.0338 0.2245 29.68 40.91 31.46 42.95 0.000 0.00

2Y/B	ENITS	CNLS	CNS C	ION COEFF	S CMS		XCPLS		CNC/			2Y/B X/C	WING 990.0	0,296	SURFACE 0.500	COEFFICIO 0.697	ENTS 0.894
0.099 0.2%	0.437	0.086	0.524 - 0.0	0418-0.019 0342-0.029 0282-0.02	32-0.0574	32.82	51.82	35.96°	0.639	-0.002		0.003	0.449	0.357	0.273 -0.144	0.219	0.237
0.500 0.697 0.894	0.538	0.082	0.619-0.0	0287-0.029 0 287- 0.029	59-0.0546	30.34	56.74	33.81	0.487	-0.137		0.036	-0.275	-0,508	-0.362 -0.619	-0.392 -0.642	-0.554
0.074	0.550	0.022	0.3/2 0.0	J-02 0.00	33 (.00.0		75.50		••••		<i>.</i> -	0.02	-0.574	-0.870	-0.949	-0.933	-0.779
	WINC			COEFFICI								0.03	-0.557	-0.967	-1.113	-1.066	-0.859
2Y/B	0.099	0,296	0.500	0.697	0.894							0.04	-0.644 -0.642	-1.10? -1.152	-1,155 -1,239	-1.058 -1.281	-0.816 -1.010
X/C	0 E40	O E43	0 542	0.543	0.543							0.05 0.06	-0.608	-1.110	•	-1.229	-1.018
0 0.01	0.543	0.543	0.543 0.404	0.543	0.543							0.08	-0.587	-1.083	-1.234	-1.187	-0.986
0.02			0.329					•		-	,	0.10	-0.561		-1.260	-1.200	-0.993
0.02			0.273				,			•		0.125	-0.526	-0.834	-1.247		-1.001
0.04			0.244							-		0.15	-0.517	` _			-1.006
0.05	0.225	0.214			0.091							0.175	-0.514	-0.717	-0.859	-1.211	-1.016
0.10	0.151	0.122	_		0.020	•			. ;			,	-0.500 -0.489	-0.665 -0.614	-0.762 -0.712	-1.198 -0.887	-1.044 -1.021
0.15	0.114	0.077	•		-0.024							0.225 0.25	-0.463	-0.574		-0.720	-1.022
0.20	0.096	- 61 04 3 - 0.010	:	0.023 -0.008	-0.054 -0.096					,		0.30	-0.445	⊴0.543	_	-0.656	-0.909
0.30 0. 4 0	0.0 59 0.027	-0.015	_		-0.102				e.			0.35	-0.633	-0.526	-0.600	-0.643	-0.810
0.50	-0.602	-0.032			-0.087					,		0.40	-0.439	-0.494	-0.576	-0.621	-0.722
0.55	0.00-	••••			· ·	•	2					0.45	-0.417	-0.456		-0.589	-0.587
0.60	0.036	0.042	0.058	0.045	-0.007							0.50	-0.387	•	-0.479		-0.463
0.65			0.110			1 2			**			0.55	0.365	•	-0.426	•	-0. 4 08
0.70	0.120	0.146			0.110				. •			0.60	-0.333	•	-0.370 -0.319		-0.371 -0.322
0.75	0.146	0.172			0.145	•		• .				0. 6 5 0.70	-0.282 -0.255	-0.332 -0.280			-0.322
0.80	0.161	0.18 <u>9</u> 0.186			0.154 0.158		•	•					-0.248	-0.238			-0.256
0.35 0.90	0.150 0.129	0.150			0.129	: -		-				0.80	-0.195	-0.198		-0.161	-0.219
0.95	0.073	0.107			0.085	•		₹.,				0.85	-0.147	-0.137		-0.114	-0.169
1.00	0.019	0.039			-0.017		•	<u> </u>	•	'.		0.90	-0.086	-0.092	-0.055	-0.056	-0.130
- - -	·	-							٠.			0.95	-0.029	-0.006		0.002	-0.082
	• -						•					1.00	0.019	0.039	0.039	0.047	-0.017

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y Y/CR	CHORDWISH 1A 1B 2 3 -2.75 -1.25 -0.25 0. 066030006 .0	4A 4B 5A 75 4.25 3.75 7.75 6	58 6 5.75 10.75 161 .256	ROW ID X X/CR	NORMAL ROWS A B C D E F 12.35 17.35 24.35 31.35 36.35 41.3 0.294 0.413 0.580 0.747 0.866 0.98	35 42,35 44,85
X	-0.006 0.083 0.067 0.059 0.063 0.049 0.040 0.050 0.037 0.031 0.025 0.051 0.054 0.066 0.074 0.139 -0. 0.144 -0. 0.155 -0. 0.147 -0. 0.142 -0. 0.133 -0. 0.122 -0. 0.103 -0. 0.100-0.034-0. 0.070-0.001-0. 0.054 0.025-0. 0.055 0.042 0. 0.027 0.005 0. 0.038 0.018 0.	-0.397 -0.395 -0.388 -0.362 -0.398 -0.412 -0.404 -0.385 -0.362 -0.392 -0.381 -0.380 -0.350 -0.363 -0.324 -0.331 -0.306 -0.326 -0.313 234 -0.234-0.213-0 -0.326 -0.313 234 -0.196 -0.196 -0.196 -0.196 -0.196 -0.196 -0.196 -0.175 -0.196 -0.175 -0.101 -0.104 -0.112 -0.104 -0.112 -0.104 -0.112 -0.104 -0.075 -0.042 -0.048 -0.021 -0.021 -0.021 -0.021 -0.006 -0.021 -0.006	-0.342 0.286 -0.311 -0.317 -0.299 -0.310 -0.309 -0.292 -0.303 -0.289 -0.290	6.75 0.161 5.75 0.137 4.75 0.113	-0.295-0.206-0.149 -0.276-0.263-0.214-0.147 -0.311-0.303-0.221-0.144-0.0 -0.362-0.362-0.331-0.213-0.137-0.0 -0.231-0.139-0.0 -0.387-0.390-0.340-0.236-0.155-0.0 -0.235-0.155-0.0 -0.235-0.155-0.0 -0.234-0.147-0.0 -0.234-0.026-0.0 -0.234-0.139-0.0 -0.234-0.134-0.0 -0.234-0.026-0.0	058 -0.035 059-0.040-0.042 035-0.044-0.013 046-0.038-0.021 021-0.015-0.006 029-0.008-0.007 013 0.010 0.011 022 0.022 0.021 025 0.042 0.005 054 0.055 0.027 066 0.067 0.039 073 0.058 0.044 082 0.066 0.048 080 0.062 0.037 -0.075

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

RUN : SEQ 166 : 3

WING COEFFICIENTS Q ALPHA CONF MACH RN/L TTR CB XCPU XCPL 9.89 2163 1288 548.2 719.2 5.00 17 CNU CNL CN CM CMU 0.893 4.347 0.484 0.079 0.563-0.0505-0.0110-0.0615 0.2402 35.44 38.96 35.93 42.70 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.099 0,296 0.500 0.697 0.894 XCPUS XCPLS XCPS CMLS CNC/ CMC/ **51/R** CMS CMUS CNUS CNLS CNS 2Y/B 0.377 0.108 0.485-0.0684-0.0223-0.0907 43.15 45.61 43.70 0.695 0.105 X/C 0.099 0.347 0.382 0.3620.463 0.093 0.556-0.0572-0.0249-0.0821 37.36 51.73 39.77 0.678-0.034 0.451 0.528 0 0.2% 0.550 0.081 0.631-0.0579-0.0271-0.0850 35.54 58.56 38.49 0.630-0.138 0.033 0.003 0.500 0.631 0.065 0.695-0.0754-0.0224-0.0978 36.96 59.63 39.07 0.547-0.177 -0.102-0.186 0.0060.697 -0.385-0.3010.595-0.021 0.574-0.1051-0.0040-0.1091 42.65 6.085 44.01 0.330-0.122 0.01 -0.402-0.132-0.313 0.894 -0.4980.02 -0.425-0.643-0.692-0.662-0.5630.03 -0.843-0.544-0.807-0.792WING LOWER SURFACE COEFFICIENTS -0.523-0.780-0.5460.04 -0.881-0.9070,2% 0.500 0.697 0.099 2Y/B -0.939-0.776-0.557-0.9450.05 -0.908X/C -0.984-0.945-0.7730.06 -0.531-0.9050.552 0.552 0.552 0.552 0 -0.915-0.761-0.989-0.9150.08 -0.5040.367 0.01 -0.764-0.957 0.10 -1.032-0.487-0.9120.301 0.02 -0.782-1.02° -0.983-0.7290.125 -0.4700.257 0.03 -0.806-1.012-0.701-1.0350.15 -0.4540.222 0.04 -1.009-0.824-0.452-1.0180.175 -0.6720.029 0.05 0.180 0.163 0.206 0.244 0.20 -0.971-1.014-0.850-0.451-0.6280.073 -0.0300.0870.10 0.171 0.125 0.225 -0.800-1.017-0.878-0.437-0.591-0.0720.15 0.053 0.024 0.129 0.089 -0.8890.25 -0.426-0.713-1.002-0.5650.20 0.001 -0.0960.031 0.101 0.061 0.30 -0.436-0.532-0.653-1.019-0.9610.30 -0.010-0.033-0.1520.017 0.062 -0.9430.35 -0.427-0.515 -0.615-0.991-0.033-0.044-0.1460.029 -0.0030.40 -0.758-0.570-0.432-0.513-0.6230.40 0.50 -0.025-0.026-0.049-0.1210.002 -0.729-0.547-0.441-0.507-0.6130.45 0.55 -0.728-0.5500.50 -0.607-0.439-0.5020.60 0.038 0.033 0.044 0.034 -0.539-0.7190.55 -0.500-0.604-0.4410.65 0.100 -0.533-0.496-0.593-0.6350.60 -0.4440.151 0.0960.70 0.129 0.157 0.139-0.521-0.537-0.423-0.482-0.5880.65 0.127 0.75 0.188 0.174 0.165 0.190 -0.514-0.577-0.387-0.468-0.4910.126 0.70 0.201 0.189 0.80 0.191 0.196 -0.491-0.431-0.3550.75 -0.447-0.4770.184 0.127 0.85 0.198 0.186 0.197 -0.432-0.291-0.286-0.3630.80-0.1690.148 0.159 0.159 0.170 0.096 0.90-0.225 -0.116 -0.089 -0.220 0.95 0.094 0.103 0.119 0.099 0.004 0.85 -0.109 -0.050 -0.033 -0.140 -0.335 0.90 1.00 0.023 0.055 0.055 -0.006 -0.246 0.95 -0.022 0.014 0.019 -0.065 -0.309 0.055 0.055 -0.006 -0.246 0.023 1.00

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID	CHORDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 16.35 0.366 16.35 0.437 19.35 0.461 20.35 0.465 22.35 0.533 23.35 0.556 24.35 0.652 25.35 0.604 26.35 0.652 30.35 0.723 31.35 0.747 32.35 0.747 32.35 0.771 33.35 0.747 33.35 0.747 32.35 0.747 33.35 0.747 33.35 0.795 34.35 0.866 37.35 0.866 37.35 0.890 38.35 0.914 39.35 0.914 39.35 0.938 40.35 0.961 41.35 0.985 42.35 1.069 45.85 1.069 45.85 1.069 46.85 1.116	0.062 0.093 0.081 0.068 0.059 0.060 0.044 0.036 0.030 0.028 0.034 0.048 0.052 0.064 0.071 0.156 -0.34 0.158 -0.25 0.168 -0.18 0.158 -0.18 0.148 -0.14 0.130 -0.09 0.101 -0.038-0.03 0.085-0.007-0.00 0.072 0.039 0.02 0.076 0.066 0.04 0.060 0.078 0.03 0.046 0.070 0.02	-0.343 -0.353 -0.373 -0.380 -0.380 -0.386 -0.385 -0.335 -0.302 -0.391 -0.315 -0.386 -0.295 -0.397 -0.303 -0.390 -0.410 -0.401 -0.401 -0.401 -0.399 -0.378-0.376-0.378-0.330 -0.354 -0.399 -0.372 -0.362-0.321 -0.399 -0.372 -0.362-0.321 -0.399 -0.372 -0.362-0.321 -0.399 -0.372 -0.362-0.321 -0.372 -0.362-0.321 -0.372 -0.372 -0.362-0.321 -0.372 -0.362 -0.372 -0.362 -0.372 -0.362 -0.372 -0.362 -0.372 -0.362 -0.372 -0.362 -0.372 -0.362 -0.372 -0.362	Y Y/CR 16.75 0.399

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD. CALIF. PRELIMINARY DATA

RUN SEQ 167.2

WING COEFFICIENTS MACH RN/L RN PT P TTR Q ALPHA CONF 0.877 4.386 9.98 2211 1340 550.6 721.2 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF 0.464 C.089 0.553-0.0348-0.0148-0.0496 0.2364 32.50 41.66 33.97 42.76 0.000 0.00

		ut	NC SECT	ION COEFF	ICIENTS							WIN	G UPPER	SURFACE	COEFFICI	ENTS
2V 4D	CNILIC			AUS CML		YCDI IS	XCPLS	YCPS	CNC/	CMC/	2Y/B		0.296	0.500	0.697	0.894
2Y/B	CNUS	CNLS	UNS U		14-0.0806						X/C	0.0	• • • • •			
0.099	0.369	0.104 0	7.4/3-0.0	1072-U.UZ	40 0 07E0	35 40	#5.51 E1 44	20 40	0.077	0.033	Ô	0507	0.433	0.355	0.320	0.336
0.296	0.459	0.097	1.0-000	J490-U.U2	60-0.0750	33.00	D1.00	30.40	0.0/7	0.023		U ,. JU	0.433	-0.006	0.525	0.000
0.500	0.515	0.101 0	0.616-0.0	0.03	16-0.0687	32.20	26.24	30.14	0.010	0.121	0.003				-0 333	
0.697	0.576	0.0880	.665-0.(0427-0.02	93-0.0720	32.42	58.10	35.83	0.523	-0.156	0.006	0 470	A 200	-0.203	-0.233	0.272
0.894	0.587	0.0050).593-0.(0.01	12-0.0964	39.52	231.8	41.27	0.340	-0.121	0.01	-0.173	-0.355	-0.433	-0.463	-0.373
											0.02	-0.465	-0.692	-0.751	-0.729	-0.581
	WING	LOWER	SURFACE	COEFFICI	ENTS						0.03	-0.572	-0.827	-0.905	-0.859	-0.658
2Y/B	0.099	0.2%	0.500		0.894						0.04	-0.564	-0.934	-0.965	-0.851	-0.601
X/C	0.077	0.270	0.500								0.05	-0.588	-0.956	-1.006	-1.012	-0.831
0	0.550	0.550	0.550	0.550	0.550						0.06	-0.554	-0.950	-1.048	-1.012	-0.834
_	0.550	0.550	0.389	0.550	0.550						80.0	-0.527	-0.965	-1.046	-0.987	-0.818
0.01	-										0.10	-0.509	-0.916	-1.088	-1.012	-0.822
0.02			0.317								0.125	-0.486	-0.756	-1.081	-1.036	-0.846
0.03			0.269								0.15	-0.475	-0.740	-1.083	-1.061	-0.862
0.04			0.237	0 600	0.040								-0.701	-1.060	-1.060	-0.883
0.05	0.243	0.208	0.204	0.190	0.063						0.175	-0.474				-0.904
0.10	0.165	0.130	0.113	0.097	0.009						0.20	-0.464	-0.650	-0.938	-1.065	
0.15	0.124	0.084	0.074	0.039	-0.027						0.225	-0.454	-0.615	-0.754	-1.063	-0.929
0.20	0.087	0.060	0.050	0.027	-0.056						0.25	-0.441	-0.581	-0.696	-1.050	-0.934
0.30	0.057	0.028	0.011	-0.008	-0.128						0.30	-0.451	-0.543	-0.642	-1.048	-1.009
0.40	0.028	0.005	-0.002	-0.024	-0.128						0.35	-0.435	-0.532	-0.613	-0.769	-0.952
0.50	0.004	-0.018	-0.008	-0.022	-0.106						0.40	-0.444	-0.525	-0.621	-0.725	-0.590
0.55	0.00	0.0.0		•••							0.45	-0.440	-0.520	-0.612	-0.731	-0.586
0.60	0.042	0.044	0.064	0.052	-0.019						0.50	-0.442	-0.514	-0.600	-0.727	-0.583
0.65	0.042	0.044	0.118	0.052	0.077						0.55	-0.450	-0.513	-0.588	-0.714	-0.560
0.70	0.133	0.151	0.169	0.150	0.101						0.60	-0.444	-0.499	-0.570	-0.512	-0.530
				0.186	0.140						0.65	-0.423	-0.478	-0.471	-0.254	-0.501
0.75	0.156	0.190	0.204								0.70	-0.449	-0.442		-0.216	-0.456
0.80	0.172	0.203	0.215		0.156							-0.351	-0.317	-0.163	-0.203	-0.401
0.85	0.170	0.199	0.216	0.200	0.152						0.75					
0.90	0.146	0.154	0.185		0.123						0.80	-0.253	-0.176		-0.171	-0.350
0.95	0.091	0.114	0.143		0.062						0.85	-0.164	-0.115	-0.082	-0.134	-0.296
1.00	0.030	0.052	0.067	0.073	-0.118						0.90	-0.088	-0.059	-0.027	-0.028	-0.234
											0.95	-0.017	0.006	0.025	0.033	-0.179
											1.00	0.030	0.052	0.067	0.073	-0.118

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER. MOFFETT FIELD. CALIF. PRELIMINARY DATA

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORE	DWISE ROWS			NORMAL ROWS	
ROW ID	1A 1B 2	3 4A 4B	5A 5B 6	ROW ID	A B C D E F G H 12,35 17,35 24,35 31,35 36,35 41,35 42,35 44,85	
Y	-2.75 -1.25 -0.25			X X/CR	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069	j
Y/CR	066030006	.018 .101 .089	7 .101 .250	X/ CIT	0.274 0.470 0.300 0.747 0.000 0.770	
X X/CR				Y Y/CR		
10.35 0.247		-0.352		16.75 0.399		
11.35 0.270		-0.360 -0.369	-0.330	13,75 0,328 10,75 0,256		
12,35 0,294 14,35 0,342		-0.374	-0.330	7.75 0.185	-0.330-0.353-0.375-0.318-0.119-0.056 -0.02	5
15,35 0,342		-0.370	-0.313	6.75 0.161	-0.283-0.153-0.031-0.012-0.009	
16.35 0.390		-0.373	0.560		7 -0.365-0.381-0.395-0.322-0.140-0.036-0.012-0.02	7
17,35 0,413		-0.385	-0.353 -0.303	4.75 0.113		2
18.35 0.437		-0.400	-0.314		-0.369-0.385-0.391	7
19.35 0.461		-0.386	-0.315	3.75 0.089 2.75 0.066		
20.35 0.485		-0.383 -0.382	-0.315 -0.320	1,75 0.042		
22.35 0.533 23.35 0.556		-0.393	-0.344	0.75 0.018		
24.35 0.580		-0.391	-0.375 -0.345	-0.25-0.006	0.041 0.059 0.05	
25.35 0.604	_ -	-0.386	-0.348	-1.25-0.030		
26.35 0.628		-0.385	-0.349	-2.25-0.054		1
27.35 0.652		-0.378	0 222	-2.75-0.066		ß
30.35 0.723		0.004 0.00	-0.323 31-0.318-0.283-0.340	-3.25-0.077 -4.25-0.101		
31.35 0.747 32.35 0.771		-0.354 -0.25 -0.303 -0.25		-5.25-0.125		
33.35 0.795		-0.246 -0.22	T T		0.098 0.068 0.067 0.109 0.102 0.096 0.01	
34.35 0.818		-0.222 -0.19		-9.25-0.220	0.079 0.090 0.091 0.095 0.095	
35.35 0.842		-0.174 -0.15				
36.35 0.866		-0.131 -0.14		-15.25-0.363	0.081 0.080 0.076	
37.35 0.890		-0.087 -0.12				
38.35 0.914		-0.062 -0.07 6-0.028 -0.05				
39.35 0.938 40.35 0.961						
41,35 0.985						
42.35 1.009	0.084 0.059	9 0.036 -0.00				
44.85 1.069			0.005-0.069			
45.85 1.092						
46.85 1.116	0.046 0.03	U U.U33				

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

RUN SEQ 165.2

WING COEFFICIENTS MACH RN/L RN PT P TTR Q ALPHA CONF CB XCPU XCPL XCP YCP TAU CF 0.860 4.364 9.93 2227 1374 552.5 711.5 5.00 17 CNU CNL CN CMU CML CM 0.464 0.083 0.547-0.0305-0.0129-0.0434 0.2345 31.58 40.59 32.95 42.88 0.000 0.00

		\ iT	NC SECTI	ON COEFF	TOTENTS							WINC	UPPER	SURFACE	COEFFICI	ENTS
7V /D	CNBKC			US CML		YCDIIS	XCPLS	YCPS	CNC/	CMC/	2Y/B		0.296	0.500	0.697	0.894
2Y/B	CNUS	CNLS	CNS CM	10.5 CITE 1545-0 01	86-0.0752	VCL 02	A3 75	#1 NA			X/C	0.077	0.270			
0.099	0.369	0.035	.400-U.U	10.0°-C0C	52-0.0681	34 48	51 51	37 44	0.671	-0.014	Ô	0.490	0.411	0.333	0.290	0.305
0.2%	0.453	0.095 0	1.5 40 -0.0	1427-U.UZ	90-0.0606	31 10	57 40	35 07	0.500	-0.017	0.003	0.470	0.4	-0.043	3,27	
0.500	0.512	0.089 0	1.602-0.0	1310-U.UZ	60-0.0658	31,10	50.70	37.07	0.002	-0.112	0.006			-0.247	-0.276	
0.697	0.588	0.077 0	1.000-U.U	13 7 0-0.02	38-0.0790	31.70	226.76	30 30	0.324	-0.132	0.000	-0.199	-0.398	-0.485	-0.512	-0.424
0.894	0.588	0.007	1.594-0.0	023-6.01	35-0.0770	30,11	220.7	30.30	0.541	0.115	0.02	-0.495	-0.741	-0.805	-0.781	-0.632
	\		CHOCACE	COFFEE	CNITC						0.02	-0.598	-0.878	-0.962	-0.915	-0.712
2) (D				COEFFICI							0.04	-0.586	-0.986	-1.024	-0.910	-0.668
2Y/B	0.099	0.2%	0.500	0.697	0.894						0.05	-0.602	-1.010	-1.064	-1.063	-0.870
X/C	0.540	0.540	0.540	0.540	0 E40						0.06	-0.574	-0.997	-1.105	-1.073	-0.886
0	0.548	0.548	0.548	0.548	0.548						0.08	-0.544	-1.009	-1.098	-1.048	-0.868
0.01			0.395								0.10	-0.528	-0.897	-1.135	-1.057	-0.874
0.02			0.328								0.10	-0.496	-0.779	-1.130	-1.089	-0.897
0.03			0.277								0.15	-0.486	-0.756	-1.128	-1.114	-0.909
0.04	0 227	0.311	0.233	0 192	0.061						0.175	-0.488	-0.707	-1.101	-1.111	-0.924
0.05	0.237	0.211	0.189	0.182	0.061						0.20	-0.483	-0.659	-0.886	-1.115	-0.946
0.10	0.164	0.128	0.099	0.085	0.002						0.225	-0.467	-0.621	-0.752	-1.112	-0.972
0.15	0.127	0.086	0.058	0.034	-0.0 4 5 -0.072						0.25	-0.453	-0.597	-0.698	-1.094	-0.978
0.20	0.095	0.058	0.037	0.012	-0.072 -0.127						0.30	-0.458	-0.563	-0.665	-1.062	-1.054
0.30	0.061	0.024	-0.006	-0.017 -0.028	-0.127						0.35	-0.447	-0.534	-0.628	-0.756	-1.123
0.40	0.030	-0.002	-0.019		-0.124						0.40	-0.446	-0.528	-0.630	-0.743	-0.779
	-0.004	-0.023	-0.016	-0.040	-0.103						0.45	-0.449	-0.508	-0.614	-0.763	-0.662
0.55	0.000	0.044	0.058	0.030	-0.017						0.50	-0.446	-0.509	-0.594	-0.755	-0.628
0.60	0.029	0.046	0.058 0.116	0.030	-0.017						0.55	-0.437	-0.491	-0.576	-0.684	-0.582
0.65	0 110	0 1/0	0.154	0.148	0.098						0.60	-0.423	-0.471	-0.434	-0.459	-0.523
0.70	0.118	0.149	0.134	0.143	0.036						0.65	-0.403	-0.430	-0.314	-0.259	-0.427
0.75	0.152	0.184	0.700	0.107	0.161						0.70	-0.382	-0.330	-0.249	-0.215	-0.349
0.80	0.164	0.197		0.203	0.166						0.75	-0.293	-0.237	-0.170	-0.185	-0.284
0.85	0.162	0.197	0.199	0.174	0.142						0.80	-0.238	-0.186	-0.138	-0.152	-0.210
0.90	0.134	0.166	0.181 0.136	0.172	0.074						0.85	-0.176	-0.118	-0.084	-0.107	-0.149
0.95	0.080		0.130	0.122	-0.070						0.90	-0.105	-0.059	-0.040	-0.037	-0.119
1.00	0.007	0.040	0.054	טכט.ט	0.070						0.95	-0.035	-0.010	0.018	0.023	-0.107
											1.00	0.007	0.040	0.054	0.050	-0.070
												0.007	J.1,7-4-0	3.02.4	3.050	J.J. J

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORDWISE 1B 2 3 -1.25 -0.25 0.79 030006 .018	4A 4B 5A 5 4.25 3.75 7.75	5B 6 6.75 10.75 .161 .256	ROW ID X X/CR	NORMAL ROWS A B C D E F G H 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 0.076 11.35 0.270 0.096 12.35 0.294 14.35 0.342 0.086 15.35 0.366 0.065 17.35 0.413 0.045 18.35 0.437 0.036 19.35 0.461 0.036 20.35 0.485 0.055 22.35 0.533 0.035 23.35 0.556 0.046 24.35 0.580 0.046 25.35 0.604 0.055 26.35 0.628 0.066 27.35 0.652 0.075 30.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 33.35 0.747 33.35 0.747 33.35 0.795 34.35 0.818 35.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.092 46.85 1.116		-0.201 -0.186 88 -0.186 65 -0.148 -0.114 -0.098 -0.108 -0.075 -0.053 -0.053 -0.012 0.008 0.018	-0.326 0.443 -0.327 -0.337 -0.338 -0.339 -0.351 -0.323	6.75 0.161 5.75 0.137 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.042 0.75 0.018 -0.25-0.006 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 -5.25-0.125 -6.25-0.129 -9.25-0.220	-0.281-0.232-0.135 -0.277-0.309-0.237-0.158 -0.327-0.340-0.275-0.147-0.086-0.114 -0.336-0.359-0.379-0.221-0.171-0.054 -0.222-0.144-0.033-0.017-0.010 -0.369-0.388-0.402-0.260-0.145-0.025-0.019-0.020 -0.263-0.145-0.041-0.020-0.002 -0.387-0.396-0.381 -0.275-0.114-0.012 0.008 0.018 -0.243-0.152-0.023-0.002 0.016 -0.261-0.157-0.003 0.017 0.036 -0.255-0.124 0.019 0.027 0.029 0.034 0.049 0.036 0.146 0.146 0.085 0.072 0.054 0.138 0.147 0.110 0.076 0.061 0.047 0.044 0.121 0.127 0.114 0.073 0.057 0.086 0.061 0.041 0.123 0.113 0.094 0.085 0.071 0.124 0.108 0.092 0.099 0.072 0.097 0.072 0.065 0.105 0.107 0.085 0.093 0.075 0.090 0.085 0.085

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD. CALIF. PRELIMINARY DATA RUN : SEQ 169 : 2

WING COEFFICIENTS Q ALPHA CONF P TTR MACH RN/L XCPU XCPL XCP YCP 0.850 4.377 9.96 2253 1404 553.9 710.4 5.00 17 CNU CNL CN CMU CML CM CB 0.451 0.088 0.540-0.0253-0.0140-0.0393 0.2319 30.61 40.82 32.28 42.98 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 2Y/B 0.099 0.2960.500 0.697 0.894 CMS XCPUS XCPLS XCPS CNC/ CMC/ CMUS CMLS CNUS CNLS CNS 2Y/B 0.356 0.108 0.464-0.0491-0.0215-0.0707 38.79 44.99 40.24 0.665 0.134 X/C 0.099 0.489 0.403 0.2920.276 0.432 0.096 0.528-0.0342-0.0254-0.0596 32.91 51.48 36.28 0.644-0.004 0.320 G 0.507 0.097 0.603-0.0301-0.0300-0.0601 30.93 56.03 34.96 0.603-0.111 0.003 -0.063-0.271-0.3050.568 0.081 0.649-0.0318-0.0275-0.0593 30.60 59.19 34.14 0.511-0.145 0.006 -0.422 -0.513-0.547-0.4520.593 0.016 0.609-0.0601-0.0164-0.0765 35.13 127.3 37.55 0.350-0.117 0.01 -0.211 -0.770 -0.836-0.8180.02 -0.667 -0.507 -0.907 -0.997-0.751-0.610-0.9530.03 WING LOWER SURFACE COEFFICIENTS -1.014 -1.061-0.950-0.710-0.597 0.04 2Y/B 0.099 0.296 0.500 0.697 0.894 -0.616 -1.034 -0.895-1.105 -1.087 0.05 X/C -1.107 -0.913-1.012 -1.135 -0.583 0.06 0.547 0.547 0.547 0.547 0 0.547 -1.080 -1.037 -1.128 -0.899 -0.550 6.080.383 0.01 -0.857 -1.163 -1.089 -0.905 -0.5290.10 0.312 0.02 -0.511 -1,119 -0,928 0.125 -0.785 -1.160 0.268 0.03 -1.146 -0.936-0.502-0.769 -1.1540.15 0.2490.04 0.175 - 0.492-0.709 -1.090-1.139 -0.953 0.201 0.058 0.179 0.05 0.244 0.223 -0.667 -0.823 0.20 -0.487-0.978 -1,145 0.125 0.007 9,105 0.173 0.087 0.10 -0.613 -0.731-0.988 0.225 -0.471-1,139 0.079 0.033 - 0.0330.135 0.0710.15 0.25 $-0.455 \le -0.594 -0.688$ -1,117 -0,996 0.20 0.056 0.050 0.012 -0.062 0.096 -0.459 -0.570 -0.641 0.30 -0.916 -1.066-0.1150.055 0.025 0.30 0.006-0.0210.35 -0.453-0.515 -0.610-0.748-1,138 -0.029-0.112 0.40 0.036 0.000 -0.009-0.448-0.509 -0.617 -0.755-0.953 -0.0870.40 -0.009 0.50 0.017 -0.027-0.016-0.500 -0.596-0.742-0.672 0.45 -0.4340.55 -0.688-0.466-0.561-0.6420.50 -0.4310.046 -0.011 0.60 0.048 0.037 0.076 -0.492-0.5490.55 -0.429 -0.488 -0.428 0.128 0.65 -0.406 -0.393-0.325 -0.458 -0.4040.128 0.60 0.146 0.112 0.162 0.70 0.147 -0.334 - 0.303-0.252 -0.430-0.3540.65 0.123 0.189 0.148 0.170 0.1970.75 -0.266 -0.255 -0.210-0.321-0.298 0.70 G.207 0.164 0.80 0.208 0.178 0.199 0.75 -0.220 -0.199 -0.224 -0.188 -0.2640.204 0.204 0.203 0.167 0.85 0.169 -0.147 - 0.170-0.172 -0.1630.80 -0.2180.154 0.171 0.135 0.170 0.174 0.90 0.85 -0.150 -0.113 -0.109 -0.096-0.137 0.089 0.100 0.129 0.129 0.087 0.95 0.90 -0.091-0.057 -0.041-0.108 -0.0390.052 -0.071 0.019 0.056 0.052 1.00 0.010 0.021 0.013 -0.097 0.95 -0.0140.056 1.00 0.019 0.052 0.052 -0.071

ID-PRESSOUT6

TST-356 PH-1 TN-66 169.2

14 FEB 84@17.16 CONT. PAGE 10

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHOR	DWISE ROWS			NORMAL ROWS
ROW ID	1A 1B 2	3 4A 4B	5A 5B 6	ROW ID	A B C D E F G H
Y	-2.75 -1.25 -0.25			X	12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y/CR	066030006	.018 .101 .089	.185 .161 .256	X/CR	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR				Y Y/CR	
10.35 0.247	0.070	-0.368		16.75 0.399	
11.35 0.270	0.085	-0.383		13.75 0.328	
12.35 0.294		-0.396	-0.344	10.75 0.256	
14.35 0.342		-0.397			-0.344-0.374-0.341-0.243-0.135-0.060 -0.028
15.35 0.366		-0.393	-0.334	6.75 0.161	-0.259-0.152-0.047-0.034-0.019
16.35 0.390 17.35 0.413		-0.386 -0.391	-0.374 -0.320	4.75 0.13/	-0.386-0.385-0.356-0.265-0.129-0.048-0.032-0.017
18.35 0.437		-0.399	-0.320	·	-0.276-0.135-0.044-0.021-0.019 -0.396-0.391-0.391
19.35 0.461	- · ·	-0.401	-0.335	3.75 0.089	·
20.35 0.485		-0.389	-0.331	2.75 0.066	
22.35 0.533		-0.363	-0.341	1.75 0.042	
23.35 0.556		-0.387	-0.320	0.75 0.018	
24.35 0.580		-0.391	-0.341 -0.329	-0.25-0.006	
25.35 0.604		-0.368	-0.333	-1.25-0.030	
26.35 0.628 27.35 0.652		-0.335 -0.331	-0.286	-2.25-0.054 -2.75-0.066	0.116 0.125 0.100 0.094 0.049 0.063 0.042
30.35 0.723	0.002	-0.551	-0.225	-3.25-0.077	0.003 0.042 0.102 0.114 0.077 0.078 0.045
31.35 0.747	0.150	-0.268 -0.26	2-0.243-0.259-0.201	-4.25-0.101	0.090 0.052 0.051 0.095 0.121 0.082 0.077 0.061
32.35 0.771	0.158	-0.232 -0.21		-5.25-0.125	0.102 0.112 0.075 0.087 0.058
33.35 0.795	0.163	-0.212 -0.21		-6.25-0.149	0.084 0.057 0.045 0.086 0.105 0.078 0.013
34.35 0.818	0.154	-0.184 -0.18			
35.35 0.842	0.145	-0.143 -0.15	_		
36,35 0.866 37,35 0.890	0.145 0.140	-0.127 -0.14	_	-15.25-0.363	0.065 0.062 0.074
38.35 0.914	0.140	-0.099 -0.11 -0.063 -0.09			
39.35 0.938	0.101-0.02				
40.35 0.961	0.076-0.009	•			
41.35 0.985	0.061 0.015				
42.35 1.009	0.060 0.062	<u> </u>	— ·		
44.85 1.069	0.025 0.05	· · · · · · · · · · · · · · ·	6 -0.019-0.072		
45.85 1.092	0.022 0.039				
46.85 1.116	0.041 0.027	/ U.U46			

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RUN SEQ 170.2

WING COEFFICIENTS
CM CB XCPU XCPL XCP YCP TAU CF MACH RN/L RN PT P TTR Q ALPHA CONF 0 837 4.382 9 97 2276 1438 554.8 705.1 5.00 17 CNU CNL CN CMU CML CM 0.453 0.084 0.538-0.0251-0.0127-0.0378 0.2313 30.54 40.06 32.04 43.01 0.000 0.00

2Y/B	(``.US	CNLS	CNS CM	ON COEFF	S CMS		XCPLS		CNC/	CMC/	2Y/B	WIN 0.099	G UPPER 0,296	SURFACE 0.500	COEFFICIO 0.697	ENTS 0.894
0.099 0.296 0.500	0.429	0.098().527-0.0	330-0.02	23-0.0692 60-0.0590 70-0.0574	32.68	51.59	36,19	0.643-	0.004	0,003 0,003	0.458	0.393	0.309 -0.081	0.262	0.272
0.697	0.578	0.069 (647-0.0	346-0.02	29-0.0575 59-0.0729	30.99	58.18	33.89	0.509-	-0.144	0.006 0.01	-0.228	-0,443	-0.294 -0.541	-0.332 -0.575	-0.489
0.894	0.599	0.014).613-0.0	D/U-U.UI:	27-0.0/27	34.52	130,7	30 . 70	0.552	0.110	0.02	-0.523	-0.798	-0.868	-0.848	-0.703
	WING	LOWER	SURFACE	COEFFICI	ENTS						0.03	-0,623	-0.938	-1.027	-0.984	-0.791
2Y/B	0.099	0,296	0.500	0.697	0.894			•		v.	0.04	-0.616	-1.044	-1.093	-0.986	-0.745
X/C				 Å = -=	0.545					,	0.05	-0.631	-1.055	-1.140	-1.107	-0.921 -0.942
0	0.545	0.545	0.545	0.545	0.545					, , ,	0.06 0.08	-0.591 -0.566	-1.032 -1.059	-1.168 -1.159	-1.1 <i>44</i> -1.114	-0.926
0.01			0.396 0.317								0.10	-0.546	-0.877	-1.192	-1.121	-0.932
0.02 0.03			0.317	•							0.125	-0.527	-0.800	-1.188	-1.154	-0.948
0.04			0.243								0.15	-0.515	-0.768	-1.182	-1,180	-0.958
0.05	0.241	0.217	0.197	0.188	0.087				•		0.175	-0.510	-0.701	-1.062	-1.173	-0.979
0.10	0.163	0.131	J.098	0.090	-0.003						0.20	-0.497	-0.656	-0.789	-1.172	-1.001
0.15	0.124	0.081	0.059	0.029	-0.043						0.225	-0.486	-0.601	-0.718	-1.164	-1.014
0.20	0.0%	0.056	0.035	0.006	-0.067						0.25	-0.467	-0.573	-0.684	-1.141 -0.828	-1.023 -1.089
0.30	0.059	0.016	-0.002	-0.026	-0.127						0.30 0.35	-0.467 -0.450	-0.543 -0.517	-0.665 -0.627	-0.020 -0.729	-1.181
0.40	0.02^{1}	0.003	-0.021	-0.038	-0.119						0.40	-0.439	-0.499	-0.616	-0.735	-0.963
0.50	0.0	-0.008	-0.021	-0.052	-0.093						0.45	-0.433	-0.474	-0.581	-0.743	-0.683
0.55 0.60	0.051	0.056	0.049	0.017	-0.014						0.50	-0.426	-0.462		-0.657	-0.638
0.65	1.0.0	0.050	0.112	0.0.7	0.0.4						0.55	-0.410	-0.438		-0.492	-0.560
0.76	0.131	0.155		0.134	0.111						0.60	-0.375	-0.381	-0.416	-0.360	-0.452
0.75	0.165	0.186		0.180	0.151						0.65	-0.331	-0.313	-0.314	-0.283	-0.353
0.80	0.171	0.196		0.200	0.163						0.70	-0.300	-0.253	-0.260	-0.239	-0.254
0.85	0.182	0.191	0.198	0.193	0.158						0.75	-0.246	-0.223	-0.206	-0.198	-0.214
0.90	0.137	0.152	_	0.156	0.135						0.80	-0.205	-0.174	-0.168	-0.158	-0.190
0.95	0.091	0.117	0.113	0.112	0.097						0.85	-0.154	-0.112		-0.107	-0.160
1.00	0.026	0.044	0.054	0.028	-0.024						0.90	-0.094	-0.060		-0.059	-0.128 -0.083
											0.95	-0.023	0.003	0.016 0.054	-0.005 0.028	-0.083 -0.02 4
											1.00	0.026	0.044	U.U.J4	0.020	-U.UZ#

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER. MOFFETT FIELD. CALIF. PRELIMINARY DATA

ID-PRESSOUT6

	CHORDWISE 1B 2 3 -1.25 -0.25 0.75 030006 .018	4A 4B 5A 5 4,25 3,75 7,75		ROW ID X X/CR	NORMAL ROWS A B C D E F G H 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 0.069 11.35 0.270 0.095 12.35 0.294 14.35 0.366 0.077 15.35 0.366 0.077 16.35 0.390 0.068 17.35 0.413 0.041 18.35 0.437 0.046 19.35 0.461 0.038 20.35 0.485 0.025 22.35 0.533 0.022 23.35 0.556 0.030 24.35 0.580 0.046 25.35 0.580 0.046 25.35 0.604 0.040 26.35 0.723 31.35 0.747 32.35 0.777 32.35 0.795 34.35 0.818 35.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.009 44.85 1.069 45.85 1.092 46.85 1.116		-0.205 -0.190 -0.172 -0.133 -0.119 -0.097 -0.062 -0.043 -0.022 -0.011 -0.005 16 0.005	-0.335 0.247 -0.324 -0.330 -0.316 -0.322 -0.300 -0.330	6.75 0.161 5.75 0.137 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.042 0.75 0.018 -0.25-0.006 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 -5.25-0.125 -6.25-0.149 -9.25-0.220 -12.25-0.292	9

RUN-SEQ 171-2

MACH	RN/L	RN PT	Р	TTR	Q ALPH	CONF					WING C	OEFFICIE	NTS			
0.829		9.97 2289			01.7 5.00		J CNL	CN	CM	U CN		CB	XCPU :	XCPL XCP		TAU CF
0.029	4.502	7.77 220) (4 5)	333.4 /	01.7 5.0	0.44	5 0.084	0.52	9-0.02		33-0.0356	0.2280	29,99 4	0.92 31.7	2 43.07	0.000 0.00
						G (.5 0.00									
		uTI	VIC SECT	TON COF	FFICIENTS	3						WII	NG UPPER	SURFACE	COEFFICI	ENTS
2Y/B	CNUS						XCPLS	XCPS	CNC/	CMC/	2Y/B	0.099	0.296	0.500	0.697	0.894
0.099	0.348				0199-0.00				0.641	0.137	X/C					
0.296	0.336	0.100 0	522-0	0339-0	0222-0.05	60 32 77	50.80	35.74	0,637	-0.000	0	0.470	0.381	0.289	0.241	0.260
0.500	0.509	0.095 0	604-0	0289-0	0286-0.09	575 30.69	55.16	34.53	0.604	-0.109	0.003			-0.105		
0.697	0.553	0.079 0	.632-0.	0296-0.0	0252-0.09	549 30.35	57.02	33.68	0.497	-0.140	0.006			-0.319	-0.358	
0.894	0.565	0.027 0	.592-0.	0477-0.	0172-0.00	49 33,43	88.44	35.95	0.340	-0.110	0.01	-0.239			-0.612	-0.517
0.074	0.303	0.02									0.02	-0.545	-0.830	-0.905	-0.888	-0.738
	WIN	G LOWER S	SURFACE	COEFFI	CIENTS						0.03	-0.636			-1.023	-0.824
2Y/B	0.099	0.296	0.500			1					0.04	-0.627	-1.079		-1.026	-0.779
X/C											0.05	-0.636			-1.163	-0.947
0	0.544	0.544	0.544	0.54	4 0.54	1					0.06	-0.602			-1.179	-0.964
0.01		_ •	0.406	•							0.08	-0.569	-1.094		-1.145	-0.954
0.02			0.331								0.10	-0.550			-1.153	-0.958
0.03			0.283	}							0.125	-0.525	-0.823		-1.182	
0.04			0.249	•							0.15	-0.514	-0.777		-1.209	-0.983
0.05	0.233	0.206	0.205	0.19							0.175	-0.504	-0.711		-1.194	-0.990
0.10	0,154	0.120	0.112								0.20	-0.500			-1.197	-1.006
0.15	0.113	0.079	0.072								0.225	-0.495	- •		-1.180	
0.20	0.099	0.057	0.039								0.25	-0.471			-0.941	-1.009
0.30	0.057	0.010	0.003			_					0.30	-0.453			-0.703	-1.087
0.40	0.027	-0.008	0.000								ै.35	-0.441			-0.683	
0.50	-0.003	-0.026	-0.009	-0.04	7 -0.07	5					0.40	-0.443			-0.675	
0.55						•					0.45	-0.407			-0.639	
0.60	0.030	0.035	0.063		8 -0.00	3					0.50	-0.386			-0.568 -0. 4 61	-0. 4 37 -0.398
0.65		• • • • •	0.119		5 0 11						0.55	-0.373			-0.364	
0.70	0.116	0.136	0.157								0.60	-0.349			-0.299	-0.300
0.75	0.153	0.167	0.191								0.65	-0.319			-0.251	-0.2 6 0
0.80	0.167	0.188	0.202								0.70	-0.297 -0.25 4			-0.207	-0.238
0.85	0.165	0.185	0.199			_					0.75	-0.254			-0.207	
0.90	0.141	0.151	0.172								0.80	-0.200			-0.115	
0.95	0.090	0.090	0.122								0.85 0.90	-0.150			-0.040	
1.00	0.024	0.035	0.052	0.04	8 -0.02	4					0.95	-0.021			0.011	-0.077
											1.00	0.024			0.048	-0.024
											, . 00	0.024	0.000	J.U_	U.U-U	O. O

	^	CHORDWISE ROWS			NORMAL ROWS
DOL ID	1A 1B	2 3 44	4B 5A 5B 6	ROW ID	A B C D E F G H
ROW ID	-2.75 -1.25 - 0		3.75 7.75 6.75 10.75	X	12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y	066030		.089 .185 .161 .256	x/cr	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
Y/CR	-,000 -,030	101. 010. 000.	.007 .107 .220	~~~~	
V V.CD				Y Y/CR	
X X/CR	0 066	-0.417		16,75 0,399	
10.35 0.247	0.066	-0.422		13.75 0.328	
11.35 0.270	0.084	-0.415	-0.377	10.75 0.256	
12.35 0.294	0.050	-0.409	-0.377	7 75 0 185	-0.377-0.374-0.355-0.236-0.166-0.065 -0.048
14.35 0.342			-0.343		
15,35 0,366		-0.416	0.18		-0.406-0.403-0.363-0.243-0.151-0.062-0.041-0.039
16.35 0.390		-0.412			
17.35 0.4.3		-0.408	-0.374 -0.31		-0.415-0.408-0.339
18.35 0.437		-0.411	-0.326		
19.35 0.461	0.032	-0.409	-0.34	-	
20.35 0.485	_	-0.413			
22.35 0.533		-0.392	-0.342		
23.35 0.556	0.036	-0.388	-0.308	- ·	
24.35 0.580		-0.339	-0.355 -0.329		
25.35 0.604		-0.361	-0.309		
26.35 0.628		-0.363			
27.35 0.652		-0.343		-2.75-0.066	
30.35 0.723		0.074	-0.24		
31.35 0.747	0.127		-0.253-0.236-0.243-0.22		
32.35 0.771	0.139		-0.249 -0.232-0.21		•
33.35 0.795		_ - _	-0.242 -0.214-0.203		
34.35 0.818		_ •	-0.201 -0.161-0.199		
35.35 0.842			-0.198 -0.161-0.164		
36.35 0.866				-15.25-0.363	0.046 0.063 0.072
37.35 0.890			-0.127 -0.137-0.139		
38.35 0.914			-0.099 -0.127-0.13		
39.35 0.938			-0.082 -0.090-0.11		
40.35 0.961			-0.066 -0.077-0.08		
41.35 0.985	0.057 (- , -	-0.040 -0.069-0.080		
42.35 1.009			-0.019 -0.046-0. <u>11</u>		
44.85 1.069	0.041 (0.025 0.024 -	-0.010 -0. 040 -0.08	T .	
45.85 1.092	0.028 (0.020 0.006			
46.85 1.116	0.034-0	0.005-0.006			

RUN : SEQ 172.2

WING COEFFICIENTS MACH RN/L RN PT P TTR Q ALPHA CONF 0.822 4.401 10.0 2312 1483 556.3 702.3 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF 0.437 0.085 0.522-0.0201-0.0140-0.0341 0.2236 29.59 41.42 31.53 42.79 0.000 0.00

		1.11	NIC CECT	ION COEFF	TOTENTS							WINC	UPPER	SURFACE	COEFFICI	ENTS
2Y/B	CNUS	_7 . <u>_</u>		MUS CML		XCPUS	XCPLS	XCPS	CNC/	CMC/	2Y/B	0.099	0.296	0.500	0.697	0.894
0.099	0.340	0.097	CNS C	0447-0 01	99-0.0647	37.81	45.49	39.49			X/C	- •				
0.077	0.347	0.077) 518-0	0317-0 02	31-0.0548	32.41	50.64	35.59	0.632	0.001	0	0.458	0.368	0.274	0.223	0.244
0.500	0.503	0.090 (592-0	0282-0.02	68-0.0550	30.61	54.91	34,29	0.592	-0.105	0.003			-0.12 9		
0.597	0.543	0.091	634-0	0282-0.02	72-0.0554	30,20	54.95	33.75	0.499	-0.140	0.006			-0.346	-0.383	
0.894	0.519	0.030	549-0.	0442-0.01	69-0.0611	33.51	81,60	36,13	0.315	-0.103	0.01	-0.261	-0.495	-0.603	-0.642	-0.546
0.074	0.5.	•									0.02	-0.562	-0.858	-0.937	-0.918	-0.768
	WINC	LOWER	SURFACE	COEFFICE	ENTS						0.03	-0.644	-0.998	-1.100	-1.057	-0.853
2Y/B	0.099	0.296	0.500		0.894						0.04	-0.642	-1.105	-1.164	-1.068	-0.808
X/C											0.05	-0.657	-1.106	-1.212	-1.205	-0.976
0	0.544	0.544	0.544	0.544	0.544						0.06	-0.623	-1.061	-1.241	-1.211	-0.98 9
0.01			0.400)							0.08	-0.589	-1.115	-1.223	-1.182	-0.975
0.02			0.323								0.10	-0.560	-0.885	-1.247	-1.183	-0.970
0.03			0.275								0.125	-0.530	-0.814	-1.245	-1.214	-0.978
0.04			0.243								0.15	-0.521	-0.770	-1.178	-1.235	-0.979 -0.980
0.05	0.230	0.214	0.207		0.102						0.175	-0.519	-0.707	-0.816 -0.781	-1.221 -1.206	-0.979
0.10	0.161	0.120	0.112		0.026						0.20	-0.502	-0.653 -0.586	-0.719	-0.951	-0.937
0.15	0.124	0.080	0.063	_ "	-0.009						0.225 0.25	-0.485 -0.464	-0.564	-0.684	-0.754	-0.739
0.20	0.087	0.057	0.047		-0.036						0.25	-0.446	-0.548	-0.649	-0.698	-0.729
0.30	0.050	0.012	0.005		-0.095						0.35	-0.416	-0.511	-0.591	-0.683	-0.803
0.40	0.010	-0.000	-0.019		-0.087						0.40	-0.419	-0.483	-0.562	-0.652	-0.751
0.50	-0.0C2	-0.007	-0.023	3 -0.016	-0.073						0.45	-0.432	-0.449		-0.603	-0.649
0.55	6 020	വ വരാ	0.063	0.050	-0.003						0.50	-0.397	-0.430		-0.540	-0.461
0.60 0.65	0.030	0.032	0.108		0.003						0.55	-0.367	-0.378		-0.459	-0.395
0.70	0.120	0.136			0.112						0.60	-0.345	-0.346		-0.375	-0.351
0.75	0.120	0.177	0.183		0.146						0.65	-0.315	-0.298		-0.311	-0.307
0.80	0.173	0.188	0.196		0.165						0.70	-0.288	-0.255	-0.266	-0.255	-0.269
0.85	0.169	0.189	0.196		0.158						0.75	-0.239	-0.221	-0.220	-0.210	-0.242
0.90	0.143	0.150	0.172		0.139						0.80	-0.198	-0.191	-0.186	-0.162	-0.205
0.95	0.092	0.097	0.120		0.093						0.85	-0.160	-0.136		-0.111	-0.162
1.00	0.005	0.034	0.048		-0.014						0.90	-0.101	-0.072		-0.041	-0.115
			-								0.95	-0.036	-0.013		0.011	-0.070
											1.00	0.005	0.034	0.048	0.054	-0.014

ROW ID Y Y/CR	CHORDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .018	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 16.35 0.366 16.35 0.413 18.35 0.437 19.35 0.485 20.35 0.580 23.35 0.580 24.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.795 34.35 0.818 35.35 0.866 37.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 1.069 44.85 1.069 45.85 1.069 46.85 1.116	0.080 0.101 0.067 0.068 0.073 0.058 0.047 0.053 0.046 0.032 0.044 0.069 0.054 0.058 0.073 0.154 -0.22 0.162 -0.20 0.150 -0.18 0.147 -0.15 0.146 -0.10 0.125 -0.08 0.091 -0.05 0.091 -0.05 0.091 -0.05 0.090 0.004-0.01 0.084 0.049 0.02 0.070 0.040 0.04 0.040 0.031 0.03 0.024 0.027 0.03	-0.195	5.75 0.137 -0.391-0.366-0.303-0.193-0.129-0.034-0.015 0.006 4.75 0.113

RUN SEQ 173.2

1.00

WING COEFFICIENTS ALPHA CONF TTR MACH RN/L XCPU XCPL XCP 9.97 2317 1501 556.2 693.4 5.00 17 CNU CNL CN CM CB CMU CML 0.812 4.384 0.427 0.092 0.518-0.0186-0.0151-0.0337 0.2222 29.36 41.49 31.51 42.87 0.0000.00WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.500 0.697 0.099 CMS XCFUS XCPLS XCPS 2Y/B CNC/ CMC/ CNUS CNLS CNS CMUS CMLS 2Y/B 0.341 0.103 0.444-0.0427-0.0216-0.0643 37.53 45.98 39.48 0.636 0.135 X/C 0.099 0.258 0.232 0.209 0.355 0.419 0.098 0.517-0.0294-0.0251-0.0545 32.02 50.69 35.56 0.630 0.001 0.449 0 0.296 -0.1500.476 0.101 0.577-0.0236-0.0285-0.0521 29.95 53.15 34.02 0.577-0.101 0.003 0.500 -0.372-0.4110.531 0.092 0.622-0.0287-0.0279-0.0566 30.40 55.47 34.09 0.490-0.139 0.006 0.697 -0.5750.01 -0.270 -0.522 -0.6730.535 0.035 0.571-0.0454-0.0185-0.0639 33.49 77.20 36.20 0.328-0.107 -0.633 -0.882 -0.969-0.793-0.572-0.9490.02 -0.881-1.0920.03 -1.034-1.135 -0.654WING LOWER SURFACE COEFFICIENTS -0.833-1.195 -1.1010.04 -0.646-1,123 0.296 0.500 0.697 0.894 2Y/B 0.099 0.05 - 1,240 -1.009-0.652 -1,113 -1.244X/C 0.06 -1.079-1.264-1.015-0.626-1.2340.543 0.543 0.543 0.543 0.543 0 0.08 -0.593-1.242 -1.210-1.002-1.085 0.408 0.01 -1.2630.10 -0.567-0.887 -0.998-1,201 0.336 0.02 -0.9910.125 -0.540-0.811-1.252 -1.2340.286 0.03 -0.528-0.953-0.763 -0.941-1.2500.15 0.261 0.04 -1.2110.175 -0.518-0.682 -0.771-0.9620.204 0.217 0.05 0.232 0.219 0.101 -0.998-0.6960.20 -0.477-0.630-0.9660.111 0.122 0.156 0.130 0.031 0.10 -0.8640.225 -0.454-0.596-0.652-0.7240.15 0.083 -0.0100.116 0.087 0.057 -0.7930.25 -0.555 -0.628-0.435-0.665-0.0350.030 0.20 0.058 0.064 0.0900.30 -0.755 -0.523-0.601-0.445-0.660-0.0840.023 0.002 0.30 0.052 0.019 -0.8160.35 -0.486-0.545-0.642-0.424-0.0090.40 0.025 0.012 0.003 -0.086-0.620-0.855-0.464-0.515-0.4110.40 0.50 -0.0150.007 0.002-0.003 -0.064-0.304-0.596-0.4900.45-0.396-0.4300.55 0.50 -0.447-0.390-0.449-0.367-0.5500.60 0.052 0.011 0.052 0.063 0.045 -0.3750.55 -0.408-0.470-0.342-0.371 0.114 0.65 -0.326-0.366-0.382-0.3490.60 -0.3430.158 0.70 0.144 0.126 0.132 0.145 -0.315-0.311-0.314-0.3060.65 -0.3060.75 0.190 0.156 0.166 0.183 0.187 -0.256 -0.255 -0.264-0.255 0.70 -0.287 0.190 0.200 0.80 0.178 0.203 0.164-0.217 -0.215-0.221-0.235-0.2450.85 0.186 0.200 0.202 0.161 0.172 -0.199 -0.182 -0.174 -0.173 -0.201 0.80 0.144 0.169 0.178 0.141 0.90 0.139 -0.151 -0.133 -0.107 -0.113 -0.154 0.95 0.090 0.112 0.124 0.133 0.093 0.85 0.006 0.042 0.056 0.054 -0.018 0.90 -0.101 -0.071 -0.037 -0.051 -0.111

-0.034 -0.000

0.006

0.95

1.00

0.026 0.014 -0.074

0.042 0.056 0.054 -0.018

14 FEB 84@17.16 CONT. PAGE 18

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y	CHULUNISE ROWS 1A 1B 2 3 4A -2.75 -1.25 -0.25 0.75 4.25066030066 .018 .101	5 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 16.35 0.366 16.35 0.366 16.35 0.413 18.35 0.437 19.35 0.485 22.35 0.533 23.35 0.556 24.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.795 34.35 0.866 37.35 0.866 37.35 0.866 37.35 0.866 37.35 0.961 41.35 0.965 42.35 1.069 44.85 1.069 45.85 1.069 45.85 1.092 46.85 1.116	0.065 -0.36 0.066 -0.37 0.062 -0.39 0.066 -0.37 0.042 -0.36 0.029 -0.36 0.021 -0.37 0.026 -0.37 0.048 -0.31 0.048 -0.31 0.070 -0.36 0.071 -0.25 0.150 -0.189 0.144 -0.169 0.144 -0.169 0.144 -0.169 0.144 -0.169 0.144 -0.138 0.134 -0.138 0.134 -0.138 0.134 -0.138 0.134 -0.093 0.106 -0.054 0.097-0.049-0.043 0.073-0.023-0.013 0.077 0.022 0.005 0.059 0.047 0.018 0.044 0.029 0.029 0.043 0.025 0.022	91 94 -0.365 89 74 -0.319 55 -0.345 -0.279 62 -0.276 76 -0.295 64 -0.302 -0.302 -0.290 32 -0.262 18 -0.311 -0.280 66 -0.282 66 -0.259	Y Y/CR 16.75 0.399

RUN SEQ 174.2

MACH RN/L RN PT P TTR Q ALPHA CONF 0.802 4.403 10.0 2339 1531 555.9 689.7 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU C 0.422 0.092 0.514-0.0186-0.0143-0.0329 0.2192 29.41 40.50 31.39 42.67 0.000 0.00

				ON COEFF							WIN		SURFACE	COEFFICI	ENTS
2Y/B				ius cml			XCPLS		CMC/	2Y/B	0.099	0.296	0.500	0.697	0.894
0.099					26-0.0616 54-0.0556					X/C	0 427	0 220	0.242	0 100	0.217
0.296 0.500					84-0.0537					0.003	0.427	0.338	0.242 -0.174	0.188	0.217
0.500					69-0.0574					0.005			-0.396	-0.442	
0.894					54-0.0634			•	=	0.01	-0.298	-0.546	-0.662	-0.708	-0.603
- •		·				_ •				0.02	-0.593	-0.915	-1.006	-0.987	-0.826
	WING	-		COEFFICI	ENTS					0.03	-0.663	-1.070	-1.171	-1.128	-0.911
2Y/B	0.099	0.2%	0.500	0.697	0.894					0.04	-0.655	-1.155	-1.238	-1.134	-0.859
X/C	0 540	0 540	0 540	0.540	0.540					0.05	-0.658	-1.102	-1.275	-1.284	-1.037
0	0.542	0.542	0.542	0.542	0.542					0.06	-0.526	-1.102		-1.270	-1.049
0.01 0.02			0.417							0.08	-0.593	-1.000	-1.275	-1.240	-1.027
0.02			0.288							0.125	-0.569 -0.533	-0.874 -0.795	-1.291 -1.239	-1,227 -1,261	-1.013 -1.000
0.04			0.254							0.15	-0.520	-0.742	-0.831	-1.270	-0.949
0.05	0.240	0.201	0.216	0.198	0.105					0.175	-0.507	-0.670	-0.734	-0.933	-0.785
0.10	0.167	0.134	0.125	0.092	0.027					0.20	-0.488	-0.623	-0.686	-0.718	-0.627
0.15	0.128	0.094	0.094	0.040	-0.019					0.225	-0.464	-0.591	-0.648	-0.669	-0.611
0.20	0.091	0.066	0.067	0.033	-0.042					0.25	-0.441	-0.549	-0.615	-0.655	-0.658
0.30	0.057	0.026	0.028	-0.008	-0.079					0.30	-0.438	-0.504	-0.591	-0.672	-0.822
0. 4 0 0.50	0.031 0.022	800.0	0.002	-0.031	-0.092	•	•			0.35	-0.410	-0.481	-0.553	-0.653	-0.916
0.55	0.022	-0.008	-0.012	-0.024	-0.076					0.40 0.45	-0.396 -0.389	-0.448 -0.407	-0.518 -0. 4 69	-0.626 -0.592	-0.943
0.60	0.065	0.055	0.064	0.049	-0.007					0.50	-0.358	-0.399		-0.535	-0.700 -0.451
0.65			0.120							0.55	-0.333	-0.365		-0.456	-0.402
0.70	0.140	0.145	0.160	0.159	0.104					0.60	-0.308	-0.331	-0.368	-0.368	-0.362
0.75	0.161	0.185	0.191	0.182	0.137					0.65	-0.283	-0.305	-0.313	-0.315	-0.322
0.80	0.172	0.189	0.200	0.197	0.148					0.70	-0.274	-0.252	-0.265	-0.264	-0.275
0.85	0.174	0.194	0.198	0.195	0.158					0.75	-0.244	-0.218	-0.207	-0.228	-0.246
0.90	0.135	0.158	0.174	0.176	0.139					0.80	-0.197	-0.193	-0.177	-0.188	-0.202
0.95 1.00	0.084 0.031	0.107 0.032	0.128 0.043	0.129 0.038	0.086 -0.021					0.85 0.90	-0.147	-0.143	-0.124	-0.130	-0.165
1.00	0.001	0.002	0.043	0.000	0.021					0.95	-0.081 -0.012	-0.078 -0.010	-0.059 0.006	-0.057 -0.001	-0.12 4 -0.070
										1.00	0.012	0.032	0.043	0.038	-0.070
												J, JJL	0.040	0.000	0.021

ROW ID Y Y/CR	CHORDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .018	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.604 26.35 0.628 27.35 0.723 31.35 0.747 32.35 0.747 32.35 0.771 33.35 0.795 34.35 0.866 37.35 0.866 37.35 0.866 37.35 0.914 39.35 0.985 40.35 0.985 42.35 1.009 44.85 1.069 45.85 1.069 45.85 1.092 46.85 1.116	0.075 0.061	.09 -0.189 -0.187-0.176 .00 -0.186 -0.192-0.163 .05 -0.160 -0.163-0.147 .09 -0.149 -0.155-0.130 .08 -0.132 -0.129-0.118 .00 -0.113-0.109 -0.113-0.109 .02 -0.081 -0.089-0.099 .04 -0.070 -0.064-0.089 .00 -0.046-0.079 .00 -0.034-0.089 .00 -0.034-0.089 .00 -0.033-0.053	Y Y/CR 16, 75 0, 399 13, 75 0, 328 10, 75 0, 185 10, 75 0, 185 10, 75 0, 181 10, 75 0, 185 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 75 0, 181 10, 181 10, 181 10, 181 10, 181 10, 181 10, 181 10, 181 10, 182 10, 181 10, 1

1.00

0.026 0.072 0.054 0.061 -0.069

RUN : SEQ 178 : 2

P TTR WING COEFFICIENTS MACH RN/L Q ALPHA CONF 0.859 3.965 9.02 2027 1252 553.2 647.0 5.00 17 CNU CNL CN CMU CML CB XCPU XCPL XCP YCP CM TAU 0.453 0.093 0.546-0.0285-0.0145-0.0431 0.2358 31.30 40.58 32.89 43.17 0.000 0.00 WING SECTION COEFFICIENTS WING UPPER SURFACE COEFFICIENTS CNUS CNLS CNS CMUS CMLS CMS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B 0.296 2Y/B 0.099 0.500 0.697 0.894 0.344 0.115 0.459-0.0465-0.0244-0.0709 38.52 46.22 40.45 0.657 0.130 0.099X/C 0.428 0.110 0.538-0.0350-0.0286-0.0636 33.18 50.92 36.82 0.657-0.009 0 0.296 0.334 0.499 0.417 0.288 0.303 0.523 0.099 0.621-0.0349-0.0307-0.0656 31.68 56.11 35.56 0.621-0.118 0.5000.003 -0.0500.590 0.080 0.670-0.0373-0.0275-0.0648 31.33 59.32 34.68 0.527-0.152 0.006 -0.258 -0.280 0.697 0.588 0.006 0.594-0.0643-0.0131-0.0774 35.93 235.5 38.03 0.341-0.115 0.894 0.01 -0.186 -0.403 -0.496-0.516 -0.440 -0.649-0.478 -0.751 -0.8130.02 -0.795WING LOWER SURFACE COEFFICIENTS -0.594 -0.800-0.972 -0.9290.03 -0.7360,296 0.500 0.697 0.894 -1.033 -0.945 -0.582 -0.996 2Y/B 0.099 0.04 -0.706X/C 0.05 -0.606 -1.023 -1.099 -1.085 -0.881 0 0.548 0.548 0.548 0.548 0.548 -0.571 -1.000 0.06-1.113 -1.083 -0.893 0.01 0.394 -0.542 -1.010 80.0 -1.107 -1.063 -0.8750.02 0.320 -0.517 -0.899 -1.135 -1.087 0.10 -0.8800.03 0.272 0.125 -0.491-0.826 -1.133 -1.097 -0.903 0.04 0.243 -0.480 -0.752 -1.135 -1.131 0.15 -0.9170.05 0.242 0.236 0.218 0.194 0.059 -0.692 -1.108 -1.113 -0.937 0.175 -0.482 0.10 0.169 0.142 -0.479 -0.642 0.120 0.103 0.004 0.20 -0.873 -1.126 -0.969 0.15 0.058 0.134 0.110 0.050 - 0.041-0.463 -0.603 0.225 -0.742 -1.119-0.9870.20 0.104 0.080 0.045 0.003 -0.062 0.25 -0.445 -0.570-0.687 -1.113 -0.990 0.30 0.076 0.034 0.011 -0.029-0.1350.30 -0.553-0.444 -0.662 -1.090 -1.055 0.40 0.030 0.010 -0.011-0.1230.35 -0.041-0.428 -0.506 -0.634-0.778 -1.121 0.50 0.026 -0.011-0.021-0.035-0.1050.40 -0.428 -0.496-0.644 -0.754 -0.6650.55 0.45 -0.435 -0.485 -0.629 -0.745-0.650 0.60 0.058 0.048 0.065 0.043 -0.018 0.50 -0.423 -0.491-0.612 -0.731-0.6320.65 0.124 0.55 -0.661 -0.404 -0.455 -0.585 -0.6080.70 0.128 0.174 0.155 0.175 0.098 -0.526 -0.390 -0.390 0.60 -0.436 -0.5600.75 0.177 0.135 0.197 0.201 0.186 -0.376 -0.329 -0.262-0.3240.65 -0.483 0.80 0.217 0.200 0.197 0.201 0.156 -0.326 0.70 -0.245-0.237 -0.215-0.351 0.85 0.217 0.185 0.205 0.209 0.157 0.75 -0.233 -0.195-0.184-0.191-0.2850.90 0.150 0.167 0.182 0.186 0.128 -0.182 -0.163 0.80 -0.147 -0.144-0.196 0.137 0.950.105 0.124 0.138 0.083 0.85 -0.146 -0.108-0.091 -0.098-0.1470.061 -0.069 1.00 0.026 0.072 0.054 -0.072 -0.143 -0.040 -0.021 0.90 -0.109 0.95 -0.001 າ.022 0.011 0.025 -0.078

	CH AR	DWISE ROWS			NORMAL ROWS
ROW ID	1A 1B 2	3 4A 4B	5A 5B 6	ROW ID	A B C D E F G H
Y Y	-2.75 -1.25 -0.25	_		X	12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y/CR	066030006			X/CR	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
17 CIT	.000: 000:				
X X/CR				Y Y/CR	
10,35 0,247		-0.388		16.75 0.399	
11,35 0,270		-0.397		13.75 0.328	
12.35 0.294		-0.407	-0.345	10.75 0.256	-0.319-0.340-0.262-0.131-0.073-0.111
14,35 0,342	880.0	-6.410			-0.345-0.378-0.369-0.224-0.147-0.027 -0.019
15,35 0,366	0.072	-0.408	-0.350	£.75 0.161	-0.304-0.141-0.046-0.035-0.035
16.35 0.390	0.067	-0.407	0.415		-0.378-0.394-0.415-0.239-0.143-0.034-0.027-0.020
17.35 0.413	0.054	-0.412	-0.378 -0.319	4.75 0.113	
18.35 0.437	0.050	-0.421	-0.324	-	-0.407-0.412-0.414
19,35 0.461	0.054	-0.434	-0.337	3.75 0.089	
20.35 0.485		-0.426	-0.333	2.75 0.066	
22.35 0.533		-0.411	-0.317	1.75 0.042	
23.35 0.556		-0.427	-0.340		
24.35 0.580		-0.414	-0.369 -0.340	-0.25-0.006	
25.35 0.604		-0.406	-0.327	-1.25-0.030	
26.35 0.628		-0.396	-0.361	-2.25-0.054	
27.35 0.652		-0.349	0.000	-2.75-0.066 -3.25-0.077	
30.35 0.723		0.384 0.36	-0.290 -0.290 -0.304	-4.25-0.101	
31.35 0.747		-	53-0.224-0.304-0.262 58 -0.252-0.257		
32.35 0.771		-0.236 -0.25 -0.244 -0.25	<u> </u>		0.099 0.068 0.046 0.102 0.118 0.075 0.013
33.35 0.795		-0.244 -0.25 -0.216 -0.19			
34.35 0.818		-0.178 -0.19		-12.25-0.292	
35.35 0.842 36.35 0.866		-0.106 -0.14	_	-15.25-0.363	
37.35 0.890		-0.099 -0.11			
38.35 0.914		-0.084 -0.0			
39.35 0.938		-			
40.35 0.961					
41.35 0.985					
42.35 1.009					
44.85 1.069					
45.85 1.092					
46.85 1.116					
-		FICE AND CDACE ADM	T. T. C. T.		

RUN SEQ 179.2

MACH RN/L RN PT P TTR Q ALPHA CONF WING COEFFICIENTS

0.821 3.995 9.09 2083 1338 552.6 630.9 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF

0.438 0.084 0.522-0.0213-0.0133-0.0346 0.2240 29.86 40.78 31.62 42.90 0.000 0.00

WING UPPER SURFACE COEFFICIENTS

200.45	Ob 11 10			ON COEFF		VCDUC	VCDLC	VCDS	CNC /	CMC/	2Y/B		0.296	SURFACE 0.500	COEFFICII 0.697	ENTS 0.894
2Y/B 0.099	CNUS 0 348	CNLS 0 097 0	CNS CM 445-0.0	IUS CML! 1444-0.01	5 CMS 93-0.0637	37,77	XCPLS 44,97	39.34	CNC/ 0.637		X/C	0.077	0.270	0.500	0,077	_
0.296	0.423	0.097.0	.520-0.0	319-0.029	55-0.0573	32.53	51,28	36.02	0.635	-0.002	0	0.453	0.364	0.27 4 -0.13 4	0.224	0.242
0.500 0.697	0.496	0.0900	.586-0.0 . 632-0.0	1281-0.020 1303-0.029	64-0.0545 51-0.0554	30.67 30.50	54.38 56.23	34.31	0.585	-0.104 -0.1 4 0	0.005 0.006			-0.134	-0.386	
0.894	0.547	0.000 0	.564-0.0	462-0.01	47-0.0609	33.44	112.4	35.79	0.324	-0.105	0.01	-0.255	-0.499	-0.610	-0.646	-0.547
	T & ./		CHOENCE	COEFFICI	ENTC						0.02 0.03	-0.550 -0.658	-0.855 -0.971	-0.941 -1.109	-0.925 -1.059	-0.769 -0.859
2Y/B	0.099	0.296	0.500	0.697	0.89 4						0.04	-0.644	-1.110	-1.167	-1.080	-0.826
X/C	0.077	0.270	0.500	0.077	0,074						0.05	-0.646	-1.125	-1.236	-1.245	-1.000
O	0.544	0.544	0.544	0.544	0.544						0.06	-0.612 -0.580	-1.065 -1.098	-1.241 -1.218	-1.217 -1.195	-0.995 -0.983
0.01 0.02			0. 4 02 0.336								0.08 0.10	-0.553	-0.863	-1.239	-1.206	-0.986
0.02			0.330								0.125	-0.537	-0.829	-1.245	-1.209	-0.993
0.04			0.246								0.15	-0.510	-0.755	-1.146 0.729	-1.241	-0.998 -1.00 4
0.05	0.221	0.211	0.217 0.111	0.189 0.100	0.077 0.020						0.175 0.20	-0. 4 93 -0. 4 96	-0.697 -0.630	-0.738 -0.729	-1.212 -1.217	-1.022
0.10 0.15	0.157 0.129	0.079	0.066	0.047	-0.021						0.225	0.469	-0.592	-0.681	-1.028	-1.008
0.20	0.096	0.066	0.041	0.031	-0.054						0.25	-0.451	-0.549	-0.650	-0.774	-1.013
0.30	0.053	0.022	0.005	-0.007 -0.028	-0.116 -0.106						0.30 0.35	-0. 4 51 -0. 4 50	-0.516 -0.508	-0.638 -0.59 4	-0.703 -0.681	-0.916 -0.796
0. 4 0 0.50	0.001 0.009	0.007 -0.010	-0.006 -0.027	-0.026 -0.0 4 5	-0.185						0.40	-0.443	-0.481	-0.564	-0.647	-0.723
0.55	0.00										0.45	-0.418	-0.431	-0.519	-0.601	-0.615
0.60	0.032	0.052	0.049	0.036	-0.016						0.50 0.55	-0.397 -0.356	-0. 4 17		-0. 546 -0. 4 78	-0. 4 54 -0.399
0.65 0.70	0.118	0.148	0.104 0.153	0.142	0.104						0.60	-0.346	-0.350		-0.381	-0.361
0.75	0.155	0.182	0.187	0.185	0.134						0.65	-0.322	-0.301	-0.310	-0.319	-0.335
0.80	0.167	0.201	0.193	0.202	0.160						0.70 0.75	-0.288 -0.241	-0.260 -0.230		-0.272 -0.213	-0.284 -0.256
0.85 0.90	0.166 0.131	0.191 0.152	0.195 0.168	0.199 0.165	0.156 0.127						0.80	-0.196	-0.192		-0.169	-0.205
0.95	0.086	0.105	0.125	0.119	0.090						0.85	-0.14c	-0.151	-0.119	-0.120	-0.153
1.00	0.013	0.043	0.032	0.043	-0.031						0.90	-0.092	-0.068		-0.052	-0.130 -0.083
											0. 9 5 1.00	-0.038 0.013	-0.007 0.043	-0.006 0.032	0.002 0.0 4 3	-0.083 -0.031
														, , , , , , , , , , , , , , , , , , ,	<u>-</u>	•

ROW ID		5B 6 6.75 10.75		NORMAL ROWS A B C D E F G H 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
X X/CR 10.35 0.247 11.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.485 22.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.652 30.35 0.747 32.35 0.866 37.35 0.866 37.35 0.890 38.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914 39.35 0.914	066030006 .018 .101 .089 .185 0.061	-0.338 0.244 -0.334 -0.335 -0.314 -0.319 -0.317 -0.315 -0.307 -0.314 -0.256	Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 6.75 0.161 5.75 0.137 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.042 0.75 0.018 -0.25-0.006 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 -5.25-0.125 -6.25-0.129 -9.25-0.220	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069

RUN SEQ 180 2

WING COEFFICIENTS Q ALPHA CONF P TTR MACH RN/L 0.821 3.495 7.95 1814 1165 550.6 549.8 5.00 17 CNU CNL CN CMU XCPU XCPL XCP CML CM CB 0.437 0.087 0.524-0.0196-0.0135-0.0330 0.2241 29.47 40.52 31.30 42.77 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 2Y/B U.099 0.296 0.500 0.697 CMS XCPUS XCPLS XCPS CNC/ CMC/ CMUS CMLS CNUS CNLS CNS 2Y/B 0.349 0.099 0.448-0.0442-0.0188-0.0630 37.66 44.03 39.07 0.642 0.140 X/C 0.099 0.225 0.273 0.244 0.370 0.428 0.098 0.526-0.0313-0.0243-0.0556 32.30 49.93 35.58 0.641 0.001 0 0.460 -0.1340.498 0.093 0.592-0.0269-0.0281-0.0550 30.40 55.10 34.31 0.591-0.105 0.003 0.500 -0.356-0.3860.534 0.084 0.618-0.0269-0.0264-0.0533 30.03 56.47 33.62 0.487-0.136 0.006 0.546 0.027 0.573-0.0448-0.0172-0.0620 33.20 88.47 35.82 0.329-0.106 -0.555-0.613 0.01 -0.266-0.498 -0.642-0.859 -0.918-0.944-0.7760.02 -0.561-0.982 -1.111 -1.062-0.8640.03 -0.649WING LOWER SURFACE COEFFICIENTS -0.836**-1.099 -1.156** -1.082 0.04 -0.6440.099 0.500 0.697 0.894 0.296 -1.0090.05 -1.145 -1.242 -1.255 -0.647X/C -1.078 -1.252 -0.985-1,220 -0.6160.06 0.544 0.544 0.544 0.544 0 -1.085 -1.232 -0.578-1,187 -0.9710.08 0.419 0.01 -0.559-0.885 -1.248 -1.198-0.9780.10 0.333 0.02 -0.806 -1.240 -1.212 0.125 -0.534-0.982 0.274 0.03 -0.5240.15 -0.780 -1.214 -1.242 -0.9890.239 0.04 0.175 -0.522 -0.726-0.851 -1.217-0.9930.198 0.116 0.210 0.05 0.221 0.214 -0.748 -0.503 0.20 -0.665 -1.208-1.0070.156 0.102 0.008 0.10 0.111 0.157 0.225 -0.488-0.618 -0.686 -0.909-1.0020.15 0.101 0.055 -0.0300.119 0.069-0.570 -1.0120.25 -0.467-0.644-0.739-0.0520.20 0.068 0.042 0.023 0.105 -0.9890.30 -0.629 -0.465-0.530 -0.6600.002 0.30 0.0600.017 -0.005-0.103-0.516 -0.585 0.35 -0.783-0.632-0.428-0.025-0.0840.022 0.005 -0.0030.40 -0.4290.40 -0.550 -0.615-0.477 -0.714-0.0210.50 -0.0790.006 -0.037 -0.0120.45 -0.526 -0.564-0.412-0.434 -0.6100.55 0.50 -0.381 -0.470-0.527-0.465-0.422 0.041 -0.0060.60 0.065 0.047 0.040 0.55 -0.397-0.393 -0.372 -0.463-0.4160.108 0.65 -0.338 -0.361-0.3780.60 -0.369-0.377 0.147 0.70 0.153 0.114 0.114 0.148 0.65 -0.315 -0.332 -0.310-0.317-0.3150.155 0.186 0.184 0.75 0.134 0.193 0.70 -0.292 -0.267 -0.277-0.261-0.2680.182 0.80 0.199 0.203 0.162 0.153 -0.218 -0.214 -0.222 0.75 -0.240-0.2450.165 0.85 0.162 0.190 0.198 0.206 -0.210 -0.171 -0.173 -0.167 -0.209 0.80 0.128 0.171 0.143 0.161 0.179 0.90 -0.155 -0.119 -0.111 0.091 -0.1560.85 -0.1100.95 0.082 0.097 0.131 0.123 0.90 -0.109 -0.077 -0.059 -0.038 -0.115 1.00 0.025 0.034 0.048 0.059 -0.010

0.006

0.048

-0.023 -0.009

0.034

0.025

0.95

1.00

0.022 -0.076

0.059 -0.010

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TST-356 PH-1 TN-66 180.2

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORDWISE ROWS		NORMAL ROWS
ROW ID	1A 1B 2 3 4A	4B 5A 5B 6	ROW ID A B C D E F G H
Y	-2.75 -1.25 -0.25 0.75 4.25	3.75 7.75 6.75 10.75	x 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y/CR	066030006 .018 .101	.089 .185 .161 .256	X/CR 0.794 0.413 0.580 0.747 0.866 0.985 1.009 1.069
x x/cr			Y Y/CR
10.35 0.247	0.037 -0.396)	16.75 0.399 -0.269-0.189-0.146
11.35 0.270	0.087 -0.390		13.75 0.328 -0.250-0.270-0.205-0.159
12.35 0.294	-0.409		10.75 0.256 -0.293-0.273-0.217-0.132-0.075-0.132 7 75 0 185 -0 343-0 340-0 330-0 223-0 145-0 052 -0.026
14,35 0,342	0.085 -0.406		7.75 0.185 -0.343-0.340-0.330-0.223-0.145-0.052 -0.026 6.75 0.161 -0.232-0.126-0.041-0.042-0.019
15.35 0.366	0.079 -0.380 0.062 -0.384		5.75 0.137 -0.377-0.381-0.354-0.207-0.131-0.053-0.011-0.018
16.35 0.390 17.35 0.413	0.062 -0.384 0.053 -0.379		4.75 0.113 -0.196-0.135-0.023 0.002-0.017
18.35 0.437	0.053 -0.376		4,25 0,101 -0,409-0,379-0,338
19.35 0.461	0.047 -0.375		3.75 0.089 -0.226-0.133-0.029-0.018 0.001
20.35 0.485	0.044 -0.373		2.75 0.066 -0.235-0.133 0.010 0.004-0.014
22.35 0.533	0.047 -0.347		1.75 0.042
23.35 0.556	0.044 -0.338		0.75 0.018
24.35 0.580	0.058 -0.338 0.062 -0.336		-1.25-0.030 0.162 0.136 0.059 0.086 0.049
25.35 0.604 26.35 0.628	0.062 -0.302		-2.25-0.054 0.131 0.130 0.076 0.092 0.056
27.35 0.652	0.094 -0.298	_	-2,75-0,066 0.053 0.058
30.35 0.723		-0.222	-3.25-0.077 0.123 0.123 0.074 0.079 0.055
31.35 0.747		-0.226-0.223-0.232-0.217	-4.25-0.101 0.078 0.054 0.033 0.118 0.117 0.066 0.074 0.057
32.35 0.771	0.161 -0.204	-0.199 -0.199-0.187	-5.25-0.125 0.108 0.101 0.087 0.074 0.052 -6.25-0.149 0.080 0.069 0.046 0.102 0.110 0.091 -0.018
33.35 0.795		-0.203 -0.178-0.182 -0.159 -0.167-0.173	-6.25-0.149
34.35 0.818 35.35 0.842	0.148 -0.158 0.139 -0.116	-0.154 -0.149-0.150	-12.25-0.292 0.063 0.057 0.074 0.088
36.35 0.866		-0.133 -0.126-0.132	-15.25-0.363 0.074 0.071 0.077
37.35 0.890		-0.109 -0.115-0.128	
38.35 0.914	0.103 -0.061	-0.089 -0.094-0.110	
39.35 0.938		-0.059 -0.071-0.098	
40.35 0.961	0.081-0.002-0.019	-0.042 -0.052-0.088	
41.35 0.985		-0.029 -0.041-0.075 -0.018 -0.042-0.132	
42.35 1.009 44.85 1.069		0.001 -0.019-0.062	
45.85 1.092			
46.85 1.116			

RUN SEQ 182.2

MACH RN/L Q ALPHA CONF TTR WING COEFFICIENTS 4.54 1018 655 542.8 307.2 5.00 17 CNU CNL CN 0.818 1.994 CMU CML CM CB XCPU XCPL XCP TAU 0.449 0.072 0.521-0.0273-0.0106-0.0379 0.2254 31.08 39.63 32.27 43.23 0.000 0.00 WING SECTION COEFFICIENTS WING UPPER SURFACE COEFFICIENTS CNUS CNLS CNS CMLS 2Y/B CMUS CMS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B 0.099 0.2960.500 0.697 0.894 0.349 0.081 0.430-0.0453-0.0132-0.0585 37.97 41.28 38.59 0.617 0.139 0.099X/C 0.441 0.082 0.523-0.0459-0.0208-0.0667 35.40 50.44 37.75 0.638-0.016 0.522 0.080 0.602-0.0371-0.0233-0.0605 32.11 54.19 35.04 0.602-0.111 0.271 0.218 0 0.440 0.359 0.201 0.500 0.003 -0.1820.697 0.553 0.073 0.626-0.0328-0.0227-0.0555 30.93 56.18 33.86 0.493-0.139 0.006 -0.368-0.3940.556 0.016 0.571-0.0476-0.0140-0.0616 33.56 113.8 35.78 0.328-0.106 0.894 0.01 -0.274-0.625-0.508-0.647-0.5590.02 -0.576 -0.865 -0.953-0.987 -0.787WING LOWER SURFACE COEFFICIENTS -0.655 -0.029 0.03 -1.115 -1.070-0.8652Y/B 0.099 0.296 0.500 0.697 0.894 0.04 -0.640 -1.109 -1.167-1.105--0.847 X/C 0.05 -0.705 -1.144-1.182 -1.246-0.9940.543 0 0.543 0.543 0.543 0.06 -0.600 -1.111 -1.279-1.217-1.0600.01 0.397 0.08 -0.578 -1.064-1.266 -1,204 -1.0060.320 0.02 -0.553 0.10 -0.859 -1.270-1.280 -1.0190.03 0.270 -0.526 0.125 -1.242 -0.887 -1.232-1.0160.04 0.237 0.15 -0.508-0.762-1.110-1.244-1.0100.05 0.187 0.209 0.220 0.207 0.065 -0.5530.175 -0.710-0.845-1,179-1.0010.10 0.150 0.104 0.129 0.072 0.011 0.20 -0.485-0.726-0.647-1.128-1.0700.15 0.093 0.059 0.109 -0.035-0.0050.225 -0.485 -0.597 -0.688-0.926-1.0240.20 0.086 0.011 0.031 0.020 -0.0570.25 -0.455-0.573 -1.025-0.665 -0.809 0.30 0.050 0.011 -0.010-0.092 -0.0150.30 -0.437-0.620-0.619-0.667-0.784-0.0060.40 -0.018-0.013 -0.0260.35 -0.084-0.411-0.502-0.601-0.648-0.7760.50 -0.014-0.015-0.013-0.027-0.1200.40 -0.453 -0.478-0.613 -0.613-0.7330.55 0.45 -0.423 -0.423-0.526 -0.602-0.6910.60 0.022 0.050 0.043 0.043 0.000 0.50 -0.409 -0.406-0.481-0.547-0.5110.65 0.119 0.55 -0.376-0.369-0.418-0.521-0.4120.70 0.110 0.151 0.157 0.098 0.099 -0.315 0.60 -0.387-0.387 -0.380-0.3710.75 0.135 0.133 0.176 0.159 0.137 -0.269-0.318-0.326 0.65 -0.327-0.3300.800.186 0.147 0.1770.175 0.156 0.70 -0.301 -0.584-0.270-0.275-0.2710.85 0.108 0.170 0.163 0.143 6.176 0.75 -0.253 -0.226-0.234-0.206-0.2930.90 J.115 0.137 0.147 0.154 0.098 0.80 -0.221-0.182-0.190-0.158-0.2090.084 0.95 0.0620.100 0.132 0.076 -0.165 -0.126 0.85 -0.129-0.155 -0.175-0.0290.024 -0.001 1.00 0.026 -0.011-0.093 -0.419 0.90 -0.064-0.132-0.0760.95 -0.036 -0.027 0.008 -0.020 -0.074 -0.029 0.024 -0.001 0.026 -0.011

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORD	DWISE ROWS			NORMAL ROW	IS
ROW ID	1A 1B 2	3 4A 4B 5A	5B 6	ROW ID	A B C C	
Υ	-2.75 -1.25 -0.25				12,35 17,35 24,35 31.	35 36.35 41.35 42.35 44.65 M7 0 866 0 985 1 009 1 069
Y/CR	066030006	.018 .101 .089 .185	.161 .256	X/CH	0.294 0.413 0.560 0.7	47 0.000 0.903 1.007 1.007
	-2.75 -1.25 -0.25 066030006 -0.031 0.100 0.071 0.065 0.054 0.051 0.042 0.037 0.045 0.045 0.045 0.047 0.053 0.056		6.75 10.75 .161 .256 -0.336 1.968 -0.310 -0.323 -0.315 -0.320 -0.305 -0.297	X X/CR Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 6.75 0.161 5.75 0.137 4.75 0.113	12.35 17.35 24.35 31. 0.294 0.413 0.580 0.7 -0.400-0. -0.303-0.279-0. -0.310-0.304-0. -0.343-0.371-0.320-0. -0. -0.387-0.391-0.322-0. -0. -0. -0. -0. -0.	35 36.35 41.35 42.35 44.85 747 0.866 0.985 1.009 1.069 .203-0.162 .208-0.153 .213-0.158-0.103-0.175
27.35 0.652 30.35 0.723 31.35 0.747 32.35 0.771 33.35 0.795 34.35 0.818 35.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.961 41.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.092 46.85 1.116	0.081 0.140 0.143 0.148 0.147 0.144 0.148 0.129 0.105 0.105-0.047 0.076-0.020 0.040 0.016 0.071 0.023 0.052 0.020 0.041 0.026	-0.295 -0.224	-0.223 9-0.227-0.213 -0.221-0.202 -0.193-0.183 -0.185-0.185	-2.75-0.066 -3.25-0.077 -4.25-0.101 -5.25-0.125 -6.25-0.149 -9.25-0.220 -12.25-0.292	0.067 0.048 0.053 0.0 0.081 0.063 0.054 0.0 0.079 0.058 0.0 0.070 0.054 0.0	.071 0.093 0.074

RUN SEQ 183.1

WING COEFFICIENTS MACH RN/L RN PT P TTR Q ALPHA CONF 0.820 1.494 3.40 745 479 533.4 225.3 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF 0.435 0.077 0.512-0.0212-0.0119-0.0331 0.2205 29.88 40.30 31.46 43.06 0.000 0.00

		VIT	NC SECTI	ON COEFF	TOTENTS							WIN	G UPPER	SURFACE	COEFFICE	ENTS
27 (D	CNUIC			IUS CML		YCDIIS	XCPLS	YCPS	CNC/	CMC/	2Y/B		0.296	0.500	0.697	0.894
2Y/B	CNUS	CNLS	CNS CM		75-0.0595	37 33	44 05	38 76			X/C	0.077	0,210			
0.099	0.340	0.092 0	5.432-0.0	210 0 02	25-0.0536	27.33	E0 94	35.70	0.674	0.100	Ô	0.440	0.357	0.275	0.221	0.244
0.296	0.424	0.087 0	512-0.0	1310-0.02	25-U.U530	30.05	50.04	24.25	0.024	-0.002	0.003	0.440	0.337	-0.135	0.22	
0.500	0.493	0.083 0	0.0-0.0	1243-0.02	45-0.0539	30.73	54,50	24.33	0.370	0.103	0.006			-0.360	-0.383	
0.697	0.544	0.070 0	1.614-0.0	1319-0.02	44-0.0562	30.00	24.03	34,17	0.400	0.137		-0.282	-0.502	-0.623	-0.613	-0.554
0.894	0.551	0.020 0	1.5/1-0.0	14/U-U.UI	61-0.0631	33.53	0.001	30.04	U.325	-0.107	0.01		-0.362	-0.935	-0.913	-0.779
											0.02	-0.563		-1.087	-1.063	-0.844
				COEFFICI							0.03	-0.641	-0.952		-1.106	-0.846
2Y/B	0.099	0.2%	0.500	0.697	0.894						0.04	-0.636	-1.110	-1.149		-0.976
X/C											0.05	-0.654	-1.146	-1.241	-1.210	
0	0.543	0.543	0.543	0.543	0. 54 3						0.06	-0.601	-1.103	-1.261	-1.205	-0.981
0.01			0.388								0.08	-0.576	-1.041	-1.256	-1.199	-0.992
0.02			0.315								0.10	-0.542	-0.965	-1.247	-1.210	-1.006
0.03			0.277								0.125	-0.525	-0.759	-1.211	-1.210	-0.986
0.04			0.238								0.15	-0.519	-0.748	-1.128	-1.172	-0.971
0.05	0.215	0.219	0.197	0.171	0.978						0.175	-0.508	-0.700	-0.797	-1.122	-0.982
0.10	0.134	0.121	0.094	0.083	0.002						0.20	-0.500	-0.624	-0.702	-1.114	-0.990
0.15	0.104	0.084	0.054	0.032	-0.043						0.225	-0.492	-0.589	-0.675	-1.064	-1.028
0.20	0.104	0.066	0.034	-0.004	-0.052						0.25	-0.457	-0.562	-0.632	-0.796	-1.025
0.30	0.057	-0.008	0.003	-0.039	-0.104						0.30	-0.448	-0.527	-0.595	-0.660	-0.955
0.40	0.024	-0.024	-0.011	-0.044	-0.101						0.35	-0.420	-0.524	-0.553	-0.668	-0.893
	-0.011	-0.021	-0.005	-0.026	-0.087						0.40	-0.417	-0.490	-0.554	-0.632	-0.693
0.55	0.0	0.02	•								0.45	-0.407	-0.442	-0.524	-0.589	-0.551
0.60	0.020	0.050	0.039	G.046	0.002						0.50	-0.389	-0.411	-0.477	-0.540	-0.493
0.65	0.020	0.030	0.093	0.0							0.55	-0.359	-0.362	-0.410	-0.462	-0.433
0.70	0.112	0.151	0.133	0.152	0.111						0.60	-0.321	-0.342	-0.380	-0.381	-0.372
0.75	0.145	0.169	0.187	0.160	0.152						0.65	-0.272	-0.325	-0.323	-0.328	-0.303
0.80	0.160	0.179	0.193	0.177	0.153						0.70	-0.259	-0.279	-0.273	-0.262	-0.258
	0.151	0.171	0.186	0.188	0.155						0.75	-0.245	-0.224	-0.234	-0.216	-0.240
0.85	0.131	0.140	0.145	0.164	0.127						0.80	-0.212	-0.175	-0.195	-0.171	-0.228
0.90		0.108	0.145	0.122	0.085						0.85	-0.144	-0.124	-0.122	-0.117	-0.184
0.95	0.076			0.122	-0.020						0.90	-0.094	-0.064	-0.061	-0.070	-0.129
1.00	0.012	0.038	0.028	0.012	0.020						0.95	-0.031	-0.008	-0.005	-0.017	-0.090
											1.00	0.012	0.038	0.028	0.012	-0.020
											1.00	0.012	0.000	0.020	0.012	0.020

	CHORDWISE	ROWS			NORMAL ROWS	
ROW ID	1A 1B 2 3	4A 4B 5A	5B 6	ROW ID		F G H
Y	-2,75 -1,25 -0,25 0,7		6.75 10.75	X	12.35 17.35 24.35 31.35 36.35 41	
Y/CR	066030006 .01	8 .101 .089 .185	.161 .256	X/CR	0.294 0.413 0.580 0.747 0.866 0.	.985 1.009 1.069
X X/CR				V V/05		
10,35 0,247	-0 080	-0.391		Y Y/CR 16,75),399		
11.35 0.270	· · · · · · · · · · · · · · · · · · ·	-0.406		13.75 0.328		
12,35 0,294	0.070	-0.387 -0.357	7	10.75 0.256	· · · · · · · · · · · · · · · · · · ·	1 090-0 206
14,35 0,342	0.082	-0.393			-0.357-0.334-0.320-0.229-0.138-0	
15,35 0,366	0.069	-0.397	-0.314	6.75 0.161		0.067-0.059-0.045
16.35 0.390	0.052	-0.390	2,154		-0.379-0.374-0.338-0.224-0.141-0	
17.35 0.413	0.045	-0.364 -0.334		4.75 0.113		0.057-0.041-0.026
18.35 0.437	0.052	-0.354	-0,311		-0.387-0.364-0.310	
19.35 0.461	0.046	-0.369	-0.296	3.75 0.089		0.020-0.014-0.018
20.35 0.485	0.032	-0.372	-0.277	2.75 0.066	• • • • • • • •	0.036-0.017 0.001
22.35 0.533 23.35 0.556	0.020	-0.367	-0.306	1.75 0.042		0.026 0.003-0.003
24.35 0.580	0.021 0.035	-0.333 -0.310 -0.320	-0.265	0.75 0.018		0.003 0.024 0.014
25,35 0,604	0.045	-0.310 -0.320 -0.321	-0,281 -0,286	-0.25-0.006 -1.25-0.030		0.023 0.012 0.007
26.35 0.628	0.057	-0.301	-0.281	-2.25-0.054	- · · · · · · · · · · · · · · · · · · ·).053
27.35 0.652	0.085	-0.289	0,201	-2.75-0.066		7.032 0.044 0.030
30,35 0,723			-0.229	-3.25-0.077		0.064 0.067 0.034
31,35 0,747	0.138 -0.24	4 5 -0.239-0.229	-0.215-0.179	-4.25-0.101	0.090 0.052 0.053 0.084 0.083 0	
32.35 0.771	0.137 -0.23	26 -0.215	-0.185-0.174	-5.25-0.125		0.067 0.059 0.052
33.35 0.795	0.138 -0.20		-0.191-0.195	-6.25-0.149		
34.35 0.818	0.146 -0.10		-0.160-0.192	•		1.064
35.35 0.842	0.134 -0.19	•	-0.163-0.160	-12.25-0.232		
36,35 0,866	0.134 -0.1	-	-0.151-0.141	-15.25-0.363	0.054 0.061 0.057	
37.35 0.890 38.35 0.914	0.116 -0.09	<u> </u>	-0.132-0.114			
39.35 0.938	0.089 -0.03 0.102-0.0 45- 0.09	- •	-0.106-0.129			
40.35 0.961	0.080-0.009-0.0		-0.105-0.121 -0.066-0.108			
41.35 0.985	0.053 0.023-0.00		-0.067-0.090			
42.35 1.009	0.043 0.012 0.02	- • - •	-0.059-0.206			
44.85 1.069	0.026 0.007 0.0	- • -	-0.045-0.066			
45.85 1.092	0.025 0.015-0.00	· • • • • • • • • • • • • • • • • • • •				
46.85 1.116	0.025 0.021-0.00	01				

TTR

Q ALPHA CONF

WING COEFFICIENTS

RUN SEQ

TST-356 PH-1 TN-66 184.2

184.2

MACH RN/L

XCPU XCPL XCP 605 536.4 311.0 5.00 17 CNU CNL CN CMU CB CM CML 0.857 1.987 4.52 977 0.456 0.083 0.539-0.0283-0.0126-0.0409 0.2329 31.21 40.16 32.59 43.17 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.500 0.697 0.8942Y/B 0.099 CMS XCPUS XCPLS XCPS CNC/ CMC/ CNUS CNLS CNS CMUS CMLS 2Y/B 0.355 0.101 0.456-0.0505-0.0190-0.0696 39.25 43.83 40.27 0.653 0.131 X/C 0.099 0.284 0.330 0.408 0.442 0.095 0.537-0.0386-0.0252-0.0638 33.74 51.40 36.88 0.655-0.009 0 0.464 -0.0530.003 0.509 0.091 0.600-0.0320-0.0284-0.0604 31.28 56.15 35.05 0.600-0.111 0.500 -0.264-0.2880.574 0.074 0.648-0.0336-0.0258-0.0593 30.84 59.94 34.16 0.510-0.145 0.CC6 0.697 0.01 -0.506-0.518 0.613 0.005 0.618-0.0661-0.0135-0.0796 35.79 293.8 37.88 0.355-0.119 -0.207-0.407-0.445-0.819-0.752-0.7930.02 -0.663-0.498-0.892-0.971-0.932-0.7400.03 -0.593 WING LOWER SURFACE COEFFICIENTS -0.965-0.718-0.996-1.029 0.04 -0.5890.296 0.500 0.697 2Y/B 0.099 0.894 -1.043 -1.114 -1.090-0.8760.05 -0.601X/C -0.885-1.032 -1.139-1.0840.06-0.5650.548 0.548 0.548 0.548 0.548 0 *-1*⊊136 -1.0790.08 -0.543-1.025-0.8910.386 0.01 -0.934-1.1450.10 -0.515-1.097-0.9100.308 0.02 -0.757 0.125 -1.135 -1.116-0.916-0.4930.03 0.2610.15 -0.755-1.120-1.137 -0.477-0.9330.229 0.04 0.175 -0.703 -1.100-0.945 -0.473-1.1290.05 0.196 0.218 0.164 0.049 0.238 0.20 -0.486-0.646-0.971-0.844 -1.1290.132 0.105 0.083 -0.0070.10 0.167 0.225 -0.610-0.735-1.124-0.478-0.990-0.0510.15 0.023 0.128 0.086 0.0640.25 -0.586-0.689-1.007-0.447-1.107-0.0800.20 0.044 0.009 0.062 0.097 0.30 -0.557-0.635-1.061-1.060-0.4500.30 0.010 0.003 0.060 -0.026-0.1210.35 -0.608-0.697 -1.134-0.527-0.440-0.005-0.115 -0.014-0.0380.033 0.40 -0.518-0.715-1.179 0.40 -0.608 -0.4430.50 -0.038-0.098 0.001 -0.016-0.010-0.496-0.600-0.735 -0.687 0.45 -0.4380.55 -0.439-0.491-0.573-0.6400.50 -0.7150.048 0.0420.051 -0.0220.029 0.60 -0.5250.55 -0.436-0.464-0.625-0.6020.102 0.65 -0.521-0.390-0.419-0.435-0.3280.60 0.70 0.119 0.156 0.153 0.149 0.093-0.306-0.4370.65 -0.375-0.369-0.2470.129 0.75 0.189 0.196 0.175 0.161 -0.292 -0.249-0.205-0.3060.70 -0.3390.201 0.213 0.190 0.80 0.169 0.157 0.75 -0.262-0.233 -0.203 -0.170 -0.231 0.161 0.193 0.189 0.210 0.85 0.160 -0.214 -0.187 -0.161 -0.131 -0.213 0.161 0.133 0.152 0.169 0.80 0.90 0.125 -0.119 -0.102 -0.079 -0.163 0.85 -0.1570.076 0.95 0.077 0.127 0.103 0.121 -0.071 -0.044 -0.051 -0.1230.90 -0.0850.027 0.051 0.048 - 0.0660.046 1.00 0.004 - 0.092-0.017 -0.002 0.013 0.95 0.046 0.051 0.048 -0.066 1.00 0.027

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ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORDWISE	RAUS		NORMAL ROWS	,
ROW ID	1A 1B 2 3		6 ROW ID	A B C D	E F G H
Y	-2.75 -1.25 -0.25 0.75			12.35 17.35 24.35 31.35	36.35 41.35 42.35 44.85
Y/CR	066030006 .018		256 X/CR	0.294 0.413 0.580 0.747	0.866 0.985 1.009 1.069
X X/CR			Y Y/CR		v 0 200
10.35 0.247		-0.394	16.75 0.399		
11.35 0.270	0.069	-0.408	13,75 0,328		2-0.175-0.119-0.200
12.35 0.294	0.054	-0. 40 9 -0.354	10.75 0.256	-0.354-0.383-0.404-0.230	
14.35 0.342		-0.410 -0.413 -0	.354 6.75 0.161	-0.296	0-0.158-0.043-0.013-0.063
15.35 0.36v		• • • •	.949 5.75 0.137	-0 392-0 415-0 425-0 249	0-0.158-0.071-0.039-0.045
16,35 0,390 17,35 0,413			342 4.75 0.113		1-0.154-0.071-0.034-0.053
18.35 0.413		• • • • • • • • • • • • • • • • • • • •	•	-0.409-0.411-0.372	
19.35 0.461	0.027	- • • • • • • • • • • • • • • • • • • •	3.75 0.039		-0.183-0.071-0.036-0.024
20.35 0.485		• • • • •	.348 2.75 0.066		I-0.1 4 5-0.038-0.010-0.035
22.35 0.533			1.75 0.042	— ▼ , —	1-0.175-0.028-0.013-0.013
23.35 0.556			0.75 0.018		2-0.130-0.013 0.001 0.005
24.35 0.580	0.039		-0.25-0.006		0.008 0.008 0.006
25.35 0.604	0.038		.356 -1.25-0.030		0.116 0.028 0.049 0.029
26.35 0.628			.345 -2.25-0.054		0.112 0.062 0.047 0.042
27.35 0.652		-0.342	-2.75-0.066		0.107 0.056 0.067 0.031
30.35 0.723			0.262 -3.25-0.077 0.302 -4.25-0.101		3 0.081 0.047 0.065 0.021
31.35 0.747	0.134 -0.27				0.072 0.059 0.059 0.037
32.35 0.771					
33.35 0.795 34.35 0.818					
35.35 0.842			• -		
36.35 0.866			1.175 -15.25-0.363		0.053
37.35 0.890			1.162		
38.35 0.914		96 -0.121 -0.125-0	138		
39.35 0.938	0.075-0.044-0.06				
40.35 0.961					
41.35 0.985					
42.35 1.009					
44.85 1.069			7.08/		
45.85 1.092		_			
46.85 1.116	0.010 0.014-0.01	I 7			

RUN SEQ 185.2

TST-356 PH-1 TN-66 185.2

2Y/B	CNUS	CNLS	CNS CM	ON COEFF US CML	S CMS	XCPUS			CNC/		2Y/B		UPPER 0.296	SURFACE 0.500	COEFFICI 0.697	ENTS 0.894
0.099 0.296 0.500	0.501	0.061 0	.570-0.1	071-0.01	16-0,1125 38-0,1209 61-0,1286	46.03	47.67	46.21	0.696 - 0	.089	0.003 0.003	0.575	0.513	0.458 0.144	0.432	0.444
0.697 0.894	0.693	0.012 0	.705-0.1	409-0.00	90-0.1499 02-0.1544	45.33	97.41	46.25	0.555-0	.211	0.006 0.01 0.02	-0.055 -0.339	-0.185 -0.495	-0.035 -0.240 -0.525	-0.038 -0.231 -0.480	-0.125 -0.314
	UTNE	LOWER	SURFACE	COEFFICI	ENTS						0.03	-0.460	-0.649	-0.667	-0.604	-0.390
2Y/B	0.099	0.296	0.500	0.697	0.894						0.04	-0.452	-0.725	-0.718	-0.625	-0.410
X/C											0.05	-0.491	-0.778	-0.790	-0.769	-0.605
0	0.561	0.561	0.561	0.561	0.561						0.06	-0.463	-0.776	-0.818 -0.830	-0.772 -0.751	-0.602 -0.555
0.01			0.330								0.08 0.10	-0.436 -0.419	-0.792 -0.810	-0.861	-0.785	-0.586
0.02 0.03			0.267 0.225				,				0.125	-0.405	-0.705	-0.862	-0.816	-0.618
0.03			0.192								0.15	-0.390	-0.639	-0.882	-0.844	-0.639
0.05	0.243	0.194	0.158	0.104	-0.035						0.175	-0.384	-0.598	-0.885	-0.849	-0.662
0.10	0.163	0.118	0.066	0.024	-0.089						0.20	-0.395	-0.585	-0.875	-0.858	-0.693
0.15	0.123	0.072	0.023	-0.028	-0.122						0.225	-0.388	-0.553	-0.862	-0.864 -0.864	-0.728 -0.7 4 5
0.20	0.099	0.041	-0.002	-0.055	-0.134						0.25 0.30	-0.37 4 -0.395	-0.524 -0.504	-0.805 -0.636	-0.888	-0.809
0.30	0.053	-0.011 -0.043	-0.053 -0.080	-0.093 -0.105	-0.200 -0.267						0.35	-0.383	-0.486	-0.590	-0.902	-0.865
0. 4 0 0.50	0.007 -0.035	-0.082	-0.084	-0.103	-0.279						0.40	-0.395	-0.489	-0.587	-0.912	-0.933
0.55	0.005	0.002	0.004	0,:02	••••						0.45	-0.409	-0.485	-0.586	-0.887	-0.983
	-0.003	-0.006	0.013	-0.020	-0.072						0.50	-0.414	-0.483	-0.581	-0.717	-0.864
0.65			0.077		0.054						0.55	-0.425	-0.486	-0.578	-0.691	-0.6 9 0
0.70	0.101	0.127	0.129	0.103	0.056						0.60	-0.425 -0.400	-0.490 -0.490	-0.579 -0.57 4		-0.610 -0.614
0.75	0.142	0.165	0.171	0.142	0.094 0.111						0.65 0.70	-0.455	-0.484	-0.572	-0.647	-0.610
0.80 0.85	0.161 0.153	0.182 0.175	0.183 0.175	0.162 0.158	0.109						0.75	-0.468	-0.499	-0.557		-0.615
0.90	0.133	0.123	0.128	0.122	0.073						0.80	-0.482	-0.522	-0.574		-0.606
0.95	0.037	0.049	0.049	0.038	-0.015						0.85	-0.487	-0.526	-0.574		-0.600
	-0.067	-0.078	-0.070	-0.222	-0.488						0.90	-0.459	-0.526	-0.458	*	-0.590
											0.95	-0.245	-0.278	-0.173		-0.576 -0.488
											1.00	-0.067	-0.078	-0.070	-0.222	-0.488

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHUNDE	OWISE ROWS			NORMAL ROWS	
ROW ID	1A 1B 2	3 4A 48	3 5A 5B	6 ROW ID	A B C D	E F G H
LOM ID	-2.75 -1.25 -0.25			75 X		36.35 41.35 42.35 44.85
•	066030006			256 X/CR	0.294 0.413 0.580 0.747	0.866 0.985 1.009 1.069
Y/CR	000000	.010 .010.	37 .105 .101	2.50 // 0.1	0,2,4 0,440 0,500 014	
V V/CD				Y Y/C	`R	
X X/CR	0.014	0.303		16.75 0.39		-0 336
10.35 0.247	0.014	-0.293 -0.208		13.75 0.32	''	
11.35 0.270	0.088		0.270	10.75 0.25		5-0.391-0.388-0.397
12.35 0.294	0.044	-0.322	-0.270	7 75 0 19	35 -0.270-0.318-0.368-0.393	
14.35 0.342		-0.333	0			5-0.433-0.316-0.229-0.092
15.35 0.366	0.054	-0.340		0.284 6.75 0.16	37 -0.303-0.342-0.393-0.413	3-0 433-0 242-0 208-0 060
16.35 0.390		-0.347	_			7-0.436-0.238-0.172-0.051
17.35 0.413	0.033	-0.349		1.280 4.75 0.11		-0.430-0.230 0.172 0.031
18.35 0.437	0.015	-0.360			0.322-0.349-0.400	3-0.464-0.223-0.170-0.083
19.35 0.461	0.011	-0.370		0.302 3.75 0.08		9-0.451-0.195-0.126-0.026
20.35 0.485	0.009	-0.374		2.75 0.06		
22,35 0,533	-0.003	-0.379		1.75 0.04		3-0.471-0.172-0.111-0.018
23.35 0.556	-0.001	-0.399	_	0.75 0.01		7-0.465-0.152-0.091-0.037
24.35 0.580	0.007	-0.400	- • - ·	0.340 -0.25-0.00		-0.105-0.078-0.030
25.35 0.604	0.007	-0.407		1.349 -1.25-0.03		3 0.119-0.066-0.027-0.021
26,35 0.628	0.024	-0.393	-0	0.355 -2.25-0.05		5 0.109-0.001 0.037 0.000
27,35 0,652	0.050	-0.392		-2.75-0.06		
30.35 0.723			_).365 -3.2 5 -0.07	0.090	0.098 0.017 0.037 0.007
31, 35 0,747	0.123	-0.457 -0.4	433-0.393-0.406-0			0.679 0.023 0.035 0.009
32.35 0.771	0.133	-0.459 -0.4	435 -0.413-0			3 0.064 0.034 0.024 0.012
33.35 0.795	0.134	-0.469 -0	-0.421-0			
34.35 0.818	0.137	-0.472 -0.	-0.418-0			
35.35 0.842	0.137	-0.474 -0.4	454 -0.423-0),382 -12,25-0,29		
36.35 0.866	0.119	-0.465 -0.4	464 -0.433-0).391 -15.25-0.36	0.040 0.04	1 0.050
37.35 0.890	0.096	-0.433 -0.4	4 62 -0.438-0).392		
38.35 0.914	0.062	-0.392 -0.4	440 -0.437-0).398		
39.35 0.938		3-0.300 -0.	379).394		
40.35 0.961	0.004-0.182		302 -0.398-0).408		
41.35 0.985).388		
42.35 1.009	-0.027-0.078					
44.85 1.069	-0.021-0.030	_ • • • -				
45.85 1.092			_			
46.85 1.116	-0.010-0.036					
40.050						

RUN SEQ 186 2

WING COEFFICIENTS Q ALPHA CONF TTR MACH RN/L XCPU XCPL XCP TAU 0.948 2.983 6.79 1443 810 545.5 508.9 5.00 17 CNU CNL CN CM CB CMU CML 0.514 0.054 0.568-0.0860-0.0033-0.0894 0.2425 41.74 31.20 40.74 42.71 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.894 0.500 0.697 CMS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B 0.099 CMUS CNUS CNLS CNS CMLS 2Y/B 0.391 0.088 0.480-0.0933-0.0140-0.1073 48.83 40.79 47.35 0.688 0.068 X/C 0.099 0.436 0.497 0.074 0.571-0.0946-0.0186-0.1132 44.06 50.06 44.83 0.696-0.077 0.578 0.500 0.408 0.4210 0.296 0.587 0.060 0.646-0.1018-0.0210-0.1227 42.35 60.09 43.99 0.646-0.177 0.117 0.003 0.500 -0.0720.687 0.023 0.709-0.1319-0.0108-0.1426 44.21 71.85 45.10 0.557-0.207 -0.0640.006 0.697 -0.273-0.2700.612-0.067 0.545-0.1372 0.0079-0.1292 47.42 36.87 48.71 0.313-0.124 -0.054 - 0.213-0.1620.01 0.894-0.5190.02 -0.347-0.526 -0.558 -0.352-0.701-0.424-0.639 -0.474-0.671 WING LOWER SURFACE COEFFICIENTS 0.03 -0.663-0.755 -0.464-0.756-0.4380.04 0.697 0.894 0.500 0.296 2Y/B 0.099 -0.824-0.797-0.496-0.807 -0.6400.05 X/C -0.850 -0.473-0.804-0.637-0.800 0.06 0.559 0.559 0.559 0.559 0.559 0 -0.861-0.5960.08 -0.448-0.810-0.785 0.342 0.01 -0.431-0.830 -0.886-0.813 -0.625 0.10 0.281 0.02 -0.413-0.893 -0.843 -0.692 -0.650 0.125 0.238 0.03 -0.906-0.871 -0.399-0.648-0.6660.15 0.203 0.04 -0.907 -0.873 -0.394 -0.695-0.6110.175 0.05 0.175 0.115 0.204 -0.0140.244 -0.890 -0.883 0.20 -0.720-0.404-0.5940.123 0.10 0.0840. 33 0.167 -0.069 0.225 -0.560-0.871-0.889 -0.756-0.3970.033 0.080 **-0**.0.9 -0.1060.15 0.128 0.25 -0.381-0.532 -0.741-0.887 -0.7720.099 0.009 -0.040-0.1210.20 0.050 0.30 -0.400-0.509-0.626-0.911-0.835 -0.003 -0.076-0.039 -0.1920.30 0.052 -0.9030.35 -0.390-0.495-0.591-0.922-0.085 -0.2370.40 0.014 -0.031 -0.061-0.589-0.928-0.8920.40 -0.402-0.497 -0.1880.50 -0.065-0.096 -0.032 -0.064-0.591-0.4170.45 -0.844-0.613-0.4910.55 -0.585 -0.423-0.5670.50 -0.487 -0.713 -0.005 -0.069-0.0000.007 0.034 0.60 -0.5790.55 -0.429-0.492-0.698 -0.5580.093 0.65 -0.579-0.693-0.433-0.492 -0.5480.60 0.055 0.70 0.142 0.114 0.112 0.142 -0.573-0.405-0.485 -0.657-0.5390.65 0.75 0.178 0.148 0.092 0.180 0.148 0.70 -0.549-0.566-0.570-0.461-0.4770.80 0.109 0.195 0.171 0.164 0.187 -0.552 -0.548 0.75 -0.460-0.498 -0.5460.85 0.159 0.185 0.169 0.102 0.194 -0.518-0.471-0.510 -0.570 -0.5360.80 0.123 0.067 0.124 0.140 0.144 0.90 0.85 -0.470-0.520 -0.560 -0.500 -0.519-0.0280.077 0.039 0.071 0.051 0.95-0.362-0.421-0.300 -0.424-0.5150.90 -0.240 -0.4210.001 -0.024-0.0321.00 -0.5000.95 -0.099 -0.091 -0.329 -0.156

1.00 -0.032 0.001 -0.024 -0.240 -0.421

ROW ID Y Y/CR	CHORDWISE RO 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .018	OWS 4A 4B 5A 5B 6 4.25 3.75 7.75 6.75 10.75 .101 .089 .185 .161 .256	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 x/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X	0.098 -0.086 0.069 0.057 -0.042 -0.027 -0.027 -0.021 -0.013 -0.013 -0.031 -0.043	-0.306 -0.320 -0.336	Y Y/CR 16.75 0.399 13.75 0.328

WING COEFFICIENTS

0.90

0.95

1.00

-0.088

0.008

-0.116

-0.009

-0.055

-0.007

-0.283

-0.202 -0.391

-0.473

TAU

P TTR

Q ALPHA CONF

RUN SEQ 187.2

-0.009

1.00

MACH RN/L

XCPU XCFL XCP CB 0.940 3.000 6.82 1456 824 545.8 509.6 5.00 17 CNU CNL CN CMU CML CM 0.510 0.056 0.566-0.0802-0.0040-0.0842 0.2411 40.73 32.09 39.87 42.58 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 2Y/B 0.099 0.296 0.500 0.697 CMS XCPUS XCFLS XCPS CNC/ CMC/ CMUS CMLS 2Y/B CNUS CNLS CNS 0.387 0.091 0.479-0.0885-0.0150-0.1035 47.84 41.44 46.62 0.686 0.075 X/C 0.099 0.395 0.503 0.075 0.578-0.0939-0.0192-0.1131 43.69 50.61 44.59 0.705-0.076 0.488 0.409 0.425 0 0.564 0.583 0.059 0.642-0.0938-0.0205-0.1143 41.08 60.11 42.81 0.641-0.169 0.003 0.100 0.500 -0.085-0.0940.671 0.031 0.701-0.1194-0.0119-0.1313 42.81 63.70 43.73 0.552-0.199 0.006 0.697 0.598-0.062 0.536-0.1291 0.0070-0.1220 46.59 36.40 47.77 0.308-0.121 -0.294-0.194-0.078 -0.235 0.01 -0.296-0.388-0.366 -0.549-0.5440.02 -0.584-0.**45**8 0.03 -0.696 -0.728-0.486-0.666WING LOWER SURFACE COEFFICIENTS -0.481 -0.691-0.776-0.777-0.4640.697 0.894 0.04 0.500 2Y/B 0.099 0.296 -0.829 -0.834-0.8480.05 -0.501 -0.662 X/C -0.823 -0.829-0.877-0.484 -0.6630.06 0.558 0.558 0.558 0.558 0 -0.830 -0.884-0.812-0.621 0.08 -0.457 0.332 0.01 -0.438 -0.850 -0.914-0.838 -0.653 0.10 0.02 0.269-0.712-0.9170.125 -0.423-0.868-0.674 0.229 0.03 -0.924-0.896-0.695 -0.654-0.408 0.15 0.196 0.04 -0.628 -0.901-0.720-0.931 -0.405 0.175 0.245 0.120 - 0.0010.168 0.05 0.196 -0.904-0.908-0.7440.20 -0.410-0.608 0.118 0.045 - 0.0650.078 0.10 0.169 0.225 -0.881 -0.913 -0.777-0.402 -0.566 0.080 0.033 -0.006-0.100 0.15 0.130 0.25 -0.387 -0.538 -0.739-0.910-0.795 -0.028-0.118 0.052 0.011 0.20 0.0980.30 -0.512 -0.860-0.401-0.635 -0.931-0.197 -0.0610.30 -0.002 0.052 -0.0350.35 -0.500-0.391-0.941−∩.928 -0.602-0.229-0.076-0.029-0.0620.40 0.015 -0.499-0.944- . . 734 0.40 -0.401-0.6010.50 -0.057-0.063-0.084-0.162-0.021-0.498-0.419-0.753(.531 -0.6030.45 0.55 -0.496-0.530 0.50 -0.598-0.421-0.7010.004 0.015 0.031 0.600.011 -0.498-0.593 0.55 -0.430 -0.700-u.535 0.098 0.65-0.499-0.429-0.585 -0.661-0.5280.60 0.056 0.147 0.120 0.70 0.107 0.135 -0.568-0.523-0.498-0.583 0.65 -0.402 0.094 0.75 0.176 0.147 0.167 0.152 -0.521-0.578 -0.526-0.4890.70 -0.452 0.190 0.101 0.194 0.80 0.163 0.167 -0.506 -0.5!4-0.519-0.558 0.75 -0.4630.099 0.188 0.85 0.183 0.162 0.162-0.5220.80 -0.496-0.521 -0.477-0.5740.063 0.137 0.127 0.137 0.120 0.90 -0.458 -0.530 -0.4460.85 -0.507 -0.4710.038 -0.0230.95 0.077 0.0680.057 -0.375-0.488-0.297 -0.379-0.161

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

-0.391

-0.202

-0.007

800.0

RUN SEQ 188.2

WING COEFFICIENTS Q ALPHA CONF TTR CB XCPU XCPL XCP 848 546.8 503.3 5.00 17 CNU CNL CN CMU CM CML 6.81 1467 0.494 0.074 0.567-0.636-0.0096-0.0732 0.2420 37.88 38.04 37.90 42.66 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.500 0.697 0.894 CMS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B 0.099 CMUS CMLS CNUS CNLS CNS 2Y/B 0.387 0.100 0.487-0.0804-0.0193-0.0997 45.79 44.19 45.46 0.698 0.088 X/C 0.0990.376 0.469 0.095 0.564-0.0672-0.0259-0.0931 39.34 52.28 41.52 0.688-0.049 0.547 0.471 0.410 0 0.553 0.080 0.634-0.0705-0.0275-0.0979 37.74 59.19 40.46 0.633-0.152 0.003 0.0680.500 -0.122-0.1300.659 0.054 0.713-0.1026-0.0186-0.1211 40.58 59.27 42.00 0.561-0.194 0.006 0.697 -0.2470.596-0.040 0.556-0.1207 0.0013-0.1194 45.26 28.33 46.49 0.319-0.123 -0.269-0.339-0.341-0.1080.01 -0.633-0.5970.02 -0.400-0.591 -0.443-0.778-0.7230.03 -0.515-0.739-0.511WING LOWER SURFACE COEFFICIENTS -0.823-0.8310.04 -0.510-0.747-0.5060.500 2Y/B 0.099 0.296 0.697 -0.535-0.872 0.05 -0.902-0.887-0.716X/C -0.9290.06 -0.506-0.883-0.868-0.7130.555 0.555 0.555 0.555 0 -0.484-0.8630.08 -0.932-0.863-0.6740.354 0.01 -0.958-0.877-0.888-0.7100.10 -0.4650.289 0.02 -0.715-0.957-0.9190.125 -0.725-0.4420.247 0.03 -0.9460.15 -0.428-0.970-0.748-0.6680.216 0.04 -0.768-0.969 0.175 -0.427-0.649-0.9470.187 0.140 0.018 0.050.2440.216 0.20 -0.791-0.433-0.935-0.615 -0.9520.167 0.094 0.056 -0.0500.130 0.10 0.225 -0.576-0.841-0.957-0.824-0.424-0.087 0.005 0.089 0.041 0.15 0.125 0.25 -0.409-0.556-0.706-0.840-0.9540.001 -0.108 0.20 0.0630.024 0.097 0.30 -0.906-0.423-0.527 -0.634-0.9710.30 -0.010-0.028 0.057 0.012 -0.168-0.9440.35 -0.411-0.504-0.597-0.9740.030 -0.009 -0.035-0.1840.40 -0.0450.40 -0.420-0.601-0.901-0.550-0.5020.50 -0.011-0.032-0.035-0.066-0.1450.45 -0.433-0.497-0.606 -0.525-0.7310.55 0.50 -0.432-0.524-U.499 -0.594-0.7160.020 -0.0430.60 0.018 0.040 0.038 0.55 -0.587 -0.710-0.522-0.437-0.4980.106 0.65 -0.579-0.520-0.605-0.434-0.496 0.072 0.600.159 0.135 0.70 0.120 0.157 -0.573-0.536-0.5190.65 -0.409-0.4810.108 0.162 0.197 0.170 0.75 0.186 0.70 -0.564-0.505-0.467-0.482-0.5180.180 0.205 0.80 0.200 0.122 0.188 0.75 -0.468 -0.509-0.475-0.504 -0.5550.200 0.181 0.118 0.85 0.199 0.175 -0.470 -0.413 -0.409-0.504-0.4670.80 0.081 0.139 0.173 0.151 0.163 0.90 0.85 -0.371 -0.217 -0.149 -0.341 -0.494 0.95 0.073 0.123 0.122 0.072 -0.009 -0.202 -0.079 -0.044 -0.292 -0.464 0.90 1.00 0.028 0.069 0.043 -0.123 -0.334 0.012 -0.214 -0.415 -0.057 0.014 0.95 0.028 0.069 0.043 -0.123 -0.334 1.00

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

ID-PRESSOUT6

	CHORDWISE	ROWS	NORMAL ROWS
ROW ID	1A 1B 2 3	4A 4B 5A 5B 6	ROW ID A B C D E F G H
Y	-2.75 -1.25 -0.25 0.75		X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y/CR	066030006 ·.038		X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR			Y Y/CR
10.35 0.247	0.036	-0.319	16.75 0.399 -0.346-0.324-0.311
11,35 0,270	0.100	-0.333	13.75 0.328 -0.254-0.311-0.347-0.337
12,35 0,294	_	-0.345 -0.291	10.75 0.256 -0.292-0.342-0.366-0.292-0.111-0.145
14.35 0.342		-0.349	7.75 0.185 -0.291-0.333-0.372-0.401-0.349-0.070 0.002
15.35 0.366	0.068	-0.346 -0.303	6.75 0.161 -0.403-0.357-0.082-0.050-0.004
16.35 0.390	0.064	-0.372 -0.020	5.75 0.137 -0.324-0.361-0.396-0.422-0.246-0.064-0.027 0.026
17.35 0.413	0.053	-0.375 -0.333 -0.292	4.75 0.113 -0.428-0.269-0.036-0.012-0.008
18.35 0.437	0.036	-0.308	4.25 0.101 -0.345-0.375-0.398
19.35 0.461	0.030	-0.380 -0.309	3.75 0.089 -0.428-0.288-0.028 0.005 0.023
20.35 0.485	0.035	-0.387 -0.318	2.75 0.066 -0.423-0.297-0.022 0.004 0.022
22.35 0.533	0.027	-0.393 -0.340	1.75 0.042 -0.441-0.302-0.008 0.013 0.033
23.35 0.556	0.032	-0.398 -0.328	0.75 0.018 -0.443-0.289-0.027 0.009 0.027
24.35 0.580	0.048	-0.398 -0.372 -0.342	-0.25-0.006 0.018 0.053 0.045
25.35 0.604	0.041	-0.404 -0.353	-1.25-0.030 0.149 0.136 0.035 0.059 0.051
26.35 0.628	0.049	-0.392 -0.358	-2.25-0.054 0.131 0.132 0.067 0.074 0.050
27.35 0.652	0.069	-0.388	-2.75-0.066 0.053 0.0 4 8
30.35 0.723 31.35 0.747	0.140	-0.360	-3.25-0.077 0.122 0.116 0.082 0.064 0.044
32.35 0.747	0.149 -0.44		-4.25-0.101 0.095 0.047 0.046 0.113 0.121 0.087 0.066 0.055
33.35 0.795	0.143 -0.43 0.174 -0.34		-5.25-0.125 0.105 0.100 0.084 0.066 0.061
34.35 0.818	0.174 -0.34 0.161 -0.33		-6.25-0.149 0.101 0.055 0.058 0.109 0.099 0.087 -0.044
35.35 0.842	0.143 -0.30	_	-9.25-0.220 0.071 0.055 0.084 0.090 0.087
36.35 0.866	0.136 -0.28		-12.25-0.292 0.075 0.067 0.070 0.078
37.35 0.890	0.119 -0.18		-15.25-0.363 0.062 0.069 0.074
38.35 0.914	0.106 -0.11		
39.35 0.938	0.096-0.075-0.07		
40.35 0.961	0.071-0.029-0.04		
41.35 0.985	0.035 0.018-0.02	· · · · · · · · · · · · · · · · · · ·	
42.35 1.009	0.059 0.053 0.00		
44.85 1.069	0.051 0.045 0.02	0,020 0,110	
45.85 1.092	0.047 0.032 0.03	0.00, 0.00	
46.85 1.116	0.058 0.032 0.03		

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RUN.SEQ 189.2

MACH 0.902	RN/L 2.995	RN 6.81	PT 1479	P 873	TTR 546 .8	-	ALPHA (.9 5.00	17 CNU	CNL 2 0.08	5 O.	CN 557	C.0-	MU 1475	-0.	CML 0120-	CM	DEFFICIE CB 0.2380		CPL XCP .17 35.6		TAU CF 0.000 0.00
	2.995 CNUS 0.366 0.451 0.528 0.627 0.594	6.81 CNI 0.10 0	1479 WING S CN 13 0.4 04 0.6 18 0.5 WER SU 296 553 218 139 102 073 024 	873 S SECT 179-0 555-0 522-0 584-0 576-0	546.8 FION C MUS. 0640- .0535- .0757- .1074- .10	0EFF1 CML9 0.023 0.026 0.030 0.030	CIENTS CMS 36-0.087 32-0.0818 03-0.079 08-0.096	17 CNU 0.47 XCPUS 7 42.51 8 36.88 5 34.31 5 37.09	XCPLS 45.93 52.08 57.40 61.30	5 0. 3 XCP 43. 39. 37.	557 32 73 78	-0.0 CNC 0.68 0.67 0.62 0.53	475 7-0 1-0 8-0	-0. CMC .10 .03 .13	0120- / 8 3 2 4	CM -0.0595 2Y/B X/C 0.006 0.020.04 0.05 0.05 0.05 0.125 0.175 0.225 0.35 0.45 0.55 0.65 0.75 0.75 0.80	CB 0.2380 WIN 0.099 0.527 -0.128 -0.417 -0.538 -0.526 -0.525 -0.475 -0.463 -0.444 -0.443 -0.436 -0.421 -0.431 -0.432 -0.421 -0.432 -0.429 -0.425 -0.299	XCPU X 35.05 39 G UPPER 0.296 0.460 -0.305 -0.634 -0.917 -0.908 -0.898 -0.898 -0.662 -0.556 -0.556 -0.556 -0.503 -0.499 -0.495 -0.485 -0.485 -0.485 -0.188	.17 35.6 SURFACE 0.500 0.390 0.390 0.036 -0.158 -0.380 -0.681 -0.886 -0.954 -0.983 -1.008 -1.008 -1.013 -0.806 -0.704 -0.615 -0.615 -0.602 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.587 -0.585 -0.252 -0.124	7 42.73 COEFFICIT 0.697 0.353 -0.174 -0.389 -0.648 -0.779 -0.805 -0.949 -0.939 -0.940 -0.969 -0.997 -1.003 -1.000 -1.009 -1.009 -1.000 -1.009 -1.000 -1.009 -1.003 -0.765 -0.721 -0.696 -0.594 -0.512 -0.344 -0.285	0.000 0.00 ENTS 0.894 0.365 -0.300 -0.501 -0.579 -0.757 -0.764 -0.739 -0.763 -0.780 -0.799 -0.817 -0.843 -0.871 -0.885 -0.953 -0.953 -0.953 -0.535 -0.537 -0.534 -0.520 -0.516 -0.501 -0.456
0.95	0.099 0.044	0.	12 4 069	0.13	2 0.	.095 .010	0.017 -0.230									0.85 0.90 0.95 1.00	-0.179 -0.112 -0.019 0.044	-0.089 -0.092 0.023 0.069	-0.069 -0.021 0.033 0.069	-0.224 -0.152 -0.079 -0.010	-0. 4 09 -0.377 -0.313 -0.230

ROW ID	CHC 1A 1B 2 -2.75 -1.25 -0.2				E F G H 5.35 41.35 42.35 44.85
Y/CR	06603000				.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.795 34.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.116	0.078-0.0 0.056 0.0 0.068 0.0 0.052 0.0 0.051 0.0	-0.333 -0.349 -0.361 -0.26 -0.365 -0.362 -0.372 -0.369 -0.3 -0.376 -0.394 -0.394 -0.399 -0.411 -0.406 -0.3 -0.411 -0.393 -0.390 -0.371 -0.410-0.3 -0.361 -0.341 -0.336 -0.320 -0.281 -0.296 -0.235 -0.212 -0.176 -0.150 -0.126 -0.128 -0.086 -0.115 031-0.032 -0.068 000-0.000 -0.042 035 0.015 -0.024 034 0.031 0.003 051 0.037 0.028 034 0.040 046 0.047	7.75 0 -0.306 6.75 0 -0.052 5.75 0 42 -0.298 4.75 0 -0.307 4.25 0 -0.311 3.75 0 -0.314 2.75 0 -0.332 1.75 0 -0.331 0.75 0	0.328	0.180 0.197-0.082-0.118 0.171-0.057 -0.004 0.159-0.035-0.019-0.010 0.143-0.023-0.028-0.004 0.145-0.021-0.017-0.001 0.150-0.024 0.003 0.028 0.151 0.005 0.002 0.025 0.169 0.005 0.011 0.048 0.176 0.015 0.031 0.037 0.035 0.034 0.051 0.143 0.056 0.068 0.052 0.135 0.082 0.096 0.061 0.129 0.069 0.082 0.065 0.121 0.084 0.078 0.069 0.100 0.086 0.081 0.072 0.092 0.081 -0.038 0.100 0.082

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RUN:SEQ 190:2

MACH 0.883	RN/L 2.993 (RN PT 5.81 149		TTR Q 547.1 490		17 CNU	CNL 1 0.08	CN 6 0.54	CM 7-0.03	U 66-0.	CML 0129-	CM	DEFFICIE CB 0.2358		CPL XCP .05 34.0		TAU CF 0.000 0.00
		uti	NC SECT	ION COEFF	ICTENTS								WIN	IG UPPER	SURFACE	COEFFICI	ENTS
2Y/B	CNUS			MUS CML		XCPUS	XCPLS	XCPS	CNC/	CMC	/	2Y/B	0.099	0.296	0.500	0.697	0.894
0.099	0.350	0 110 0	461-0 (1530-0112 1540-0 02	21-0.0760							X/C					
0.033	0.330	0.110 0	542-0 (0.02 0.457-0 0.2	48-0.0705	35.17	51.64	38.00	0.662	-0.01	8	0	0.496	0.441	0.362	0.321	0.337
0.500	0.527	0.075 0	615-0	0411-0.02	84-0.0695	32.80	57.22	36.30	0.615	-0.12	2	0.003			-0.006		
0.697	0.527	0.082 0	679-0.0	0506-0.02	75-0.0781	33,48	58,69	36.51	0.534	-0.16	2	0.006			-0.209	-0.227	
0.894	0.581	0.001 0	.583-0.0	0843-0.00	99-0.0942	39.51	751.4	41,17	0.334	-0.11	8	0.01	-0.168	-0.352	-0.439	-0.453	-0.368
0.074	0.50.											0.02	-0.454	-0.691	-0.748	-0.717	-0.574
	WING	G LOWER	SURFACE	COEFFICI	ENTS							0.03	-0.561	-0.870	-0.903	-0.850	-0.657
2Y/B	0.099	0.296	0.500		0.894							0.04	-0.553	-0.929	-0.957	-0.878	-0.640
X/C												0.05	-0.549	-0.977	-1.032	-1.023	-0.819
0	0.551	0.551	0.551	0.551	0.551							0.06	-0.531	-0.963	-1.051	-1.012	-0.824
0.01			0.385									80.0	-0.512	-0.953	-1.048	-0.998	-0.804
0.02			0.313									0.10	-0.490	-0.892	-1.071	-1.010	-0.823
0.03			0.261									0.125	-0.466	-0.745	-1.070 1.075	-1.033	-0.8 4 2 -0.852
0.04			0.225	0.470	0.074							0.15	-0.458 -0.454	-0.727 -0.689	-1.075 -1.063	-1.063 -1.054	-0.877
0.05	0.255	0.207	0.195		0.071							0.175	-0.457	-0.645	-0.971	-1.058	-0.901
0.10	0.178	0.122	0.098		-0.002							0.20 0.225	-0.446	-0.610	-0.779	-1.066	-0.927
0.15	0.135	0.083	0.056		-0.040							0.25	-0.429		-0.707	-1.058	-0.939
0.20	0.105	0.057	0.033		-0.066 -0.133							0.30	-0.431	-0.546	-0.658	-1.054	-1.006
0.30	0.068	0.017	-0.004 -0.025		-0.133							0.35	-0.420		-0.628	-0.849	-0.900
0.40	0.036	0.001 -0.018	-0.023									0.40	-0.429		-0.634	-0.740	-0.565
0.50 0.55	0.002	-0.018	-0.022	-0.020	0.102							0.45	-0.435		-0.626	-0.746	-0.562
0.55	0.029	0.038	0.065	0.048	-0.020							0.50	-0.432		-0.613	-0.745	-0.564
0.65	0.027	0.000	0.122		0.020							0.55	-0.428		-0.604	-0.723	-0.564
0.70	0.123	0.157	0.164		0.095							0.60	-0.420	-0.491	-0.583	-0.546	-0.548
0.75	0.172	0.191	0.191		0.126							0.65	-0.398	-0.473	-0.466	-0.326	-0.510
0.80	0.184	0.186	0.201		0.156							0.70	-0.372	-0.440	-0.291	-0.259	-0.462
0.85	0.179	0.188	0.200		0.151							0.75	-0.301	-0.262	-0.200	-0.226	-0.408
0.90	0.146	0.153	0.167	0.173	0.123							0.80	-0.238		-0.133	-0.184	-0.343
0.95	0.106	0.105	0.121	0.126	0.040							0.85	-0.167	-0.108	-0.089	-0.126	-0.284
1.00	0.036	0.056	0.060	0.049	-0.122							0.90	-0.080	-0.050	-0.038	-0.070	-0.231
												0.95	-0.006	0.006	0.018	-0.005	-0.170
			•									1.00	0.036	0.056	0.060	0.049	-0.122

ROW ID Y Y/CR		MS 4A 4B 5A 5B 6 4.25 3.75 7.75 6.75 10.75 .101 .089 .185 .161 .256	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.556 24.35 0.556 24.35 0.580 25.35 0.604 26.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.795 34.35 0.866 37.35 0.866 37.35 0.866 37.35 0.866 37.35 0.914 39.35 0.938 40.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.092 46.85 1.116	0.101 -0.0083 -0.0069 -0.0061 -0.0062 -0.0043 -0.0033 -0.0040 -0.0058 -0.0049 -0.0058 -0.0062 -0.070 -0.0155 -0.352 -0.152 -0.274 -0.144 -0.202 -0.143 -0.167 -0.136 -0.142 -0.125 -0.107 -0.111 -0.086 -0.142 -0.125 -0.107 -0.111 -0.086 -0.109-0.020-0.034 -0.093 -0.001-0.007 -0.055 -0.036 -0.011 -0.052 -0.038 -0.022 -0.040 -0.038 -0.025 -0.059 -0.044 -0.031	0.359 0.370 0.379 0.386 0.383 0.385 0.388 0.400 0.400 0.407 0.407 0.404 0.407 0.404 0.407 0.4030 0.404 0.325 0.325 0.382 -0.316 -0.287-0.261-0.277-0.304 -0.354 0.382 -0.316 -0.287-0.261-0.277-0.304 -0.312 -0.251 -0.269-0.236 -0.251 -0.269-0.236 -0.251 -0.269-0.236 -0.251 -0.176 -0.175-0.182 -0.139 -0.159-0.142 -0.094 -0.115-0.117 -0.080 -0.094-0.104 -0.050 -0.080-0.085 -0.027 -0.018 -0.035-0.068 -0.002 -0.028-0.125 0.019 -0.009-0.037	Y Y/CR 16,75 0,399 13.75 0,328

RUN - SER 191 - 2

WING COEFFICIENTS Q ALPHA CONF CB XCPU XCPL XCP 929 547.1 482.2 5.00 17 CNU CNL CM CN CMU CML 6.81 1507 0.454 0.090 0.544-0.0270-0.0146-0.0416 0.2330 30.95 41.20 32.64 42.81 0.00 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.6970.894 0.500 0.296 2Y/B 0.099 XCPUS XCPLS XCPS CNC/ CMC/ CMLS CMS CNUS CNLS CNS CMUS 2Y/B 0.366 0.108 0.474-0.0537-0.0228-0.0765 39.67 46.19 41.15 0.679 0.128 X/C 0.099 0.483 0.304 0.289 0.419 0.335 0.424 0.108 0.532-0.0335-0.0280-0.0615 32.90 50.89 36.55 0.650-0.007 0 -0.0470.003 0.509 0.089 0.598-0.0307-0.0286-0.0594 31.04 57.10 34.92 0.598-0.110 0.500 -0.278-0.2550.006 0.584 0.085 0.668-0.0367-0.0288-0.0656 31.29 59.08 34.81 0.526-0.152 0.697 -0.512 -0.432-0.202 -0.495-0.4030.580 0.011 0.591-0.0612-0.0142-0.0754 35.57 151.3 37.76 0.339-0.114 0.01 0.894 -0.811-0.781-0.645-0.498-0.7530.02 -0.967-0.917-0.733-0.608-0.9300.03 WING LOWER SURFACE COEFFICIENTS -0.986 -1.021-0.944-0.713-0.5960.04 0.500 0.296 0.894 0.697 0.099 -0.865-1.036-1.099-1.085-0.5920.05X/C -1.080-0.882-1.018-1.1170.06-0.5750.548 0.548 0.548 0.548 **0** -1.1060.08 -0.549-1.001-1.062-0.867 0.386 0.01 -0.8840.10 -0.527-0.847-1.129 -1.076 0.314 0.02 -0.500-0.766-1.1270.125 -1.094-0.9020.03 0.266 -0.748-1.120-1.124-0.9110.15 -0.4910.231 0.04-0.489-0.687-1.0940.175 -1.114-0.9270.079 0.05 0.199 0.182 0.238 0.231

0.0890.000 0.10 0.143 0.101 0.162 -0.0390.057 G.0340.15 0.119 0.103 0.077 0.036 0.016 -0.0650.095 0.20 -0.004-0.016-0.1240.30 0.034 0.060 -0.024-0.1200.013 -0.0180.40 0.033 -0.025-0.0980.50 -0.003-0.0240.012 0.55 0.050 0.042 0.0510.060-0.0120.60 0.1100.65 0.70 0.150 0.156 0.106 0.1300.161 0.138 0.187 0.75 0.192 0.198 0.165 0.207 0.207 0.175 0.206 0.158 0.80 0.205 0.205 0.211 0.164 0.85 0.176 0.184 0.145 0.171 0.171 0.134 0.90 0.121 0.138 0.071 0.950.121 0.109 0.050 -0.043 0.074 0.076 0.024 1.00

-0.856-0.636-1.1160.20 -0.486-0.976 0.225 -0.474-0.740-1.119-0.6040.25 -1.108 -0.984 -0.572-0.686-0.458-0.543-0.650-1.049 0.30 -0.464-1.086-0.511-0.624-1,118 -0.453-0.770-0.506-0.624-0.742-0.457-0.788 0.40-0.489-0.612-0.754-0.462-0.6430.45 0.50 -0.456-0.470-0.595-0.735-0.611 0.55 -0.449-0.436-0.578-0.623-0.556-0.385-0.414-0.459-0.378-0.480 0.60-0.349-0.300-0.373-0.253 -0.403 0.65 -0.210 -0.315 -0.322 -0.280 -0.2340.70 -0.190 -0.187 -0.264 -0.297 -0.224 0.75 -0.242 -0.157 -0.145 -0.147 -0.234 -0.172 -0.109 -0.087 -0.096 -0.1700.85 -0.091 -0.053 -0.031 -0.042 -0.1170.900.016 -0.072 -0.0210.023 0.038 0.95 0.074 0.076 0.050 - 0.0430.024

			CHORD	WISE F	ROWS									NORMAL				_	•	11	
ROW ID	1A	iB 1 os	2	3	4A	4B	5A 7.75	5B			X ID	A 12.35	B 17 35	C 24_35	31 :	_	: 35. ⊿	11 35 <i>l</i>	G 12.35	H 44.85	
·	-2.75 - 066 -	•	- • -	0.75	4,25 ,101	3.75 .089	7.75 .185	6.75			^ ⟨∕CR	0.294	0.413	0.580	0.74	17 O.8	366).985 1	.009	1.069	-
X X/CR		.000	.000		-0.377					Y 16. 3	Y/CR 75 0.399			-0.33	9-0.2	201-0	168				
10.35 0.247 11.35 0.270	0.021 0.092				-0.380						75 0.328		-0.281	1-0.31	0-0.3	216-0	146			·	
12,35 0.294	0.072				-0.387		-0.341			10.	75 0.256							-0.095-			
14.35 0.342	0.080				-0.390				0.04	_	75 0.185	-0.341	-0.366	5-0.36	7-0.	252-0	.13/- .127	·U.U5/ ·0.060-		-0.017 -0.029	
15.35 0.366	0.070				-0.388				-0.344 -0.119	6. A	75 0.161 75 0.137	-0 366	-U 30%	₅ _በ 38							
16.35 0.390 17.35 0.413	0.059 0.063	•	<u> </u>		-0.397 -0.407		-0.366	1 .	-0.328		75 0.137		-0.5 X	. 0.50	-0.	238-0	135-	-0.017-	-0.012	0.017	
18.35 0.437	0.054				-0.399		0.000	,	-0.34	_	25 0.101		-0.40	7-0.39	6						
19.35 0.461	0.046				-0.407		•		-0.33	-	75 0.089						_	-0.042-			
20.35 0.485	0.047				-0.407				-0.34		75 0.066							0.007			
22.35 0.533	0.044				-0.390				-0.34 <i>4</i> -0.33		75 0.042 75 0.018							0.013			
23,35 0,556 24,35 0,580	0.045 0.048		appent of the state of the stat		-0.422 -0.396		-0,367	,	-0.33		25-0.006				0	_ /				0.033	
25.35 0.604	0.053				-0.365		0,00,		-0.33		25-0.030			7.						0.066	
26,35 0,628	0.063				-0.349				~0.32	=	25-0.054					143 0	. 148	0.082	0.107	0.058	
27.35 0.652	0.086				-0.349	·			0.24		75-0.066		0.06	3 0.04		117 0	1 20	0.077	0.092	0.067	
30.35 0.723		0 152		0 201	.	_0 39 <i>4</i>	_0_252	_n_o	-0.2 4 3 30-0.23	-	25-0.077 25-0.101	n ngg	0 079	5 0 05						0.063	
31.35 0.747 32.35 0.771		0.153 0.163		-0.291 -0.255		-0.241			31-0.21		25-0.125		0.07	J 0.05	0.	110 0	110	0.089	0.082	0.052	
33.35 0.795		0.167		-0.216		-0.207		_	23-0.19		25-0.149							0.091		-0.048	
34.35 0.818		0.158		-0.204		-0.167		- •	78-0.18		25-0.220							0.082			
35.35 0.842		0.146		-0.168	_	-0.177			62-0.17		25-0.292		0.079	9 0.07		087 U 072 O					
36.35 0.866		0.146		-0.140		-0.160 -0.131			37-0.1 <i>4</i> ° 22-0.13°		25-0.363			0.00	9 0.	J/2 U	.000	,			
37.35 0.890 38.35 0.914		0.141 0.120		-0.109 -0.071		-0.131			13-0.14												
39.35 0.938				'-0.03		-0.069		-	92-0.10												
40.35 0.961				-0.01		-0.037		-0.0	73-0.08	•											
41,35 0.985				0.013		-0.042			60-0.09												
42.35 1.009		- •	=	0.03°		-0.022		- • -	19-0.14												
44.85 1.069 45.85 1.092		· =	-	3 0.04° 3 0.04		-0.011		-0.0	29-0.04	,											
46.85 1.116			-	0.02																	
				- , <u></u>				- T.O													

RUN SEQ 192:2

MACH RN/L Q ALPHA CONF WING COEFFICIENTS TTR 0.853 2.996 6.82 1514 941 547.0 479.7 5.00 17 CNU CNL CMU CML CM CB XCPU XCPL XCP 0.449 0.088 0.537-0.0248-0.0138-0.0386 0.2312 30.54 40.63 32.19 43.07 0.000 0.00 WING SECTION COEFFICIENTS WING UPPER SURFACE COEFFICIENTS CNUS CNLS CNS CMUS CMLS 2Y/B XCPUS XCPLS XCPS 0.2% CMS 0.697 CNC/ CMC/ 0.099 0.500 0.894 0.351 0.106 0.458-0.0480-0.0212-0.0692 38.66 44.95 40.12 0.656 0.133 0.099X/C 0.2960.434 0.099 0.533-0.0347-0.0259-0.0606 33.01 51.22 36.39 0.650-0.005 0.480 0.402 0.323 0.274 0 0.291 0.501 0.093 0.595-0.0283-0.0285-0.0568 30.65 55.57 34.56 0.594-0.107 0.500 0.003 -0.0640.568 0.081 0.649-0.0311-0.0272-0.0583 30.47 58.60 33.98 0.511-0.145 -0.2780.697 0.006 -0.3030.590 0.018 0.607-0.0586-0.0160-0.0745 34.94 114.7 37.27 0.349-0.116 0.894 -0.5220.01 -0.216 -0.423 -0.542-0.459-0.8370.02 -0.773-0.514-0.812-0.671WING LOWER SURFACE COEFFICIENTS 0.03 -0.612-0.954-0.995-0.950-0.7570.500 2Y/B 0.099 0.2960.697 0.894 0.04 -0.606-1.052-1.013 -0.975-0.738X/C 0.05 -0.599-1.061 -1.130-1,119-0.8940.547 0.547 0.547 0.547 0.547 -0.5830 0.06 -1.040 -1.147 -1.111 -0.9050.01 0.399 80.0 -0.556-1.026-1.133 -1.092-0.8920.02 0.324 -0.534-1.1560.10 -0.860-1.101-0.9100.03 0.276 0.125 -0.506-0.792 -1.149 -1.119 -0.9260.04 -0.4920.246 0.15 -0.764-1.142 -1.149-0.9310.05 0.242 0.214 0.217 0.179 0.076 0.175 -0.488-0.702-1.064-1.136-0.9490.10 0.162 0.134 0.111 0.011 0.20 -0.6540.090 -0.488-0.804-1.139-0.9740.15 0.118 0.094 0.063 0.034 -0.033-0.4770.225-0.620-0.720-1.141-0.9980.20 0.041 0.098 0.066 0.018 -0.0620.25 -0.459-0.593 -0.680-1.125-1.007 0.30 0.0640.018 0.003 -0.014-0.1110.30 -0.446-0.561-0.649-0.948-1.0740.40 0.029 0.001 -0.016-0.031-0.1060.35 -9.430-0.531 -0.623-0.739-1.146J.50 0.011 -0.010-0.013 -0.035-0.091-0.4420.40 -0.507-0.621-0.870-0.7380.55 0.45 -0.441-0.490-0.580-0.737-0.6600.60 0.059 0.046 0.054 0.050 0.50 -0.001-0.438-0.471-0.560-0.632 -0.6470.65 0.112 0.55 -0.406-0.426-0.470-0.487-0.5870.152 0.70 0.138 0.158 0.150 0.110 -0.393-0.3880.60 -0.363-0.336-0.5100.75 0.157 0.186 0.196 0.189 0.139 0.65 -0.345-0.320-0.295-0.263-0.3950.80 0.210 0.174 0.193 0.205 0.159 0.70 -0.313-0.265-0.241-0.222-0.2780.85 0.202 0.169 0.189 0.200 0.156 0.75 -0.267-0.230 -0.194-0.187-0.2250.90 0.130 0.159 0.167 0.173 0.141 0.80 -0.140-0.213-0.182 -0.153 -0.1760.95 0.083 0.118 0.121 0.126 0.094 -0.151 -0.123 -0.091 -0.088 -0.143 0.850.027 0.050 0.066 0.052 -0.047 0.90 -0.088 -0.061 -0.042 -0.034 -0.115 0.004 0.95 -0.0170.019 0.015 -0.079 0.050 1.00 0.027 0.0660.052 - 0.047

	CHORDVI	ISE ROWS			NORMAL	ROWS	
ROW ID	1A 1B 2	3 4A 4B 5A	5B 6	ROW ID	A B C	D E	F G H
Y	_ • •		6,75 10,75	X	12.35 17.35 24.35	31,35,36,35	41,35 42,35 44,85
Y/CR	066030006 .	.018 .101 .089 .185	.161 .256	X/CR	0.294 0.413 0.580	U./4/ U.666	7,007 F00,1 COP.0
x x/cr				Y Y/CR			
X X/CR 10.35 0.247	0.640	-0.365	5	16.75 0.399		-0.225-0.173	
11.35 0.270	0.095	-0.371	•	13.75 0.328	-0.289-0.313		
12,35 0.294		-0.374 -0.354		10.75 0.256			1-0.097-0.145
14.35 0.342	0.093	-0.382	2 252		-0.354-0.372-0.382	-0.284-0.153	3-0.066 -0.037
15.35 0.366	0.074	-0.394	-0.350	6.75 0.161	0 272 0 302 0 42E	-0.240-0.150 -0.201-0.156	-0.053-0.047-0.047 -0.047-0.023-0.009
16.35 0.390	0.061	-0.390	-0.11 <i>4</i> -0.329	4.75 0.113	-0.372-0.403-0.423	-0.301-0.130 -0.278-0.135	-0.053-0.027 0.009
17.35 0.413	0.059	-0.403 -0.372 -0.417	-0.339	4.75 0.113	-0.374-0.403-0.330		9.030 0.027 0.007
18,35 0,437 19,35 0,461	0.053 0.060	-0.403	-0.322	3.75 0.069	0.074 0.400 0.000	-0,260-0,138	-0.023-0.000 0.013
20.35 0.485	0.000	-0.401	-0.330	2.75 0.066			'-0.031~0.009 0.017
22.35 0.533	0.040	-0.390	-0.347	1.75 0.042		-	-0.014 0.000 0.018
23.35 0.556	0.044	-0.353	-0.338	0.75 0.018		-0.266-0.108	0.014 0.037 0.032
24.35 0.580	0.058	-0.330 -0.382	-0.330	-0.25-0.006		0 450 0 457	0.038 0.056 0.045
25.35 0.604	0.059	-0.335	-0.33 4	-1.25-0.030			0.094 0.080 0.069 0.085 0.105 0.076
26.35 0.628	0.069	-0.348 0.337	-0.363	-2.25-0.054	0.059 0.058		0.065 0.105 0.070
27.35 0.652	0.090	-0.327	-6,276	-2.75-0.066 -3.25-0.077	0.059 0.050		0.088 0.084 0.069
30.35 0.723 31.35 0.747	0.152 -0	0.266 -0.260-0.284-		-4.25-0.101	0 108 0 078 0 066		0.105 0.090 0.057
32.35 0.771			0.236-0.222	-5.25-0.125		0.117 0.122	0.087 0.091 0.056
33.35 0.795	_		0.208-0.228	-6.25-0.149	0.112 0.082 0.073		
34.35 0.818	_ *	0.158 -0.169 -	0.181-0.196	-9 <i>.2</i> 5 - 0 <i>.</i> 220		0.108 0.097	
35.35 0.842	0.153 -0		0.168-0.173			0.091 0.086	
36.35 0.866		- ·		-15.25-0.363	0.090	0.074 0.078	
37.35 0.890	- •		0.135-0.102				
38.35 0.914	_ •		0.117-0.09 4 0.090-0.089				
39.35 0.938	0.123-0.013-0 0.107 0.011-0		0.063-0.095				
40.35 0.961 41.35 0.985			0.053-0.097				
42.35 1.009			0.047-0.145				
44.85 1.069			0.047-0.049				
45.85 1.092	0.064 0.026 (
46.85 1.116	0.053 0.019 (0.041					
	ALATYONIAL AFFORMALITICO	C AND COACE ADMINICTOATI	CN				

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RUN . SEQ 193.2

WING COEFFICIENTS Q ALPHA CONF MACH RN/L TTR CB CML XCPU XCPL XCP 955 547.1 475.7 5.00 17 CNU CNL CN CMU CM 6.81 1522 0.843 2.994 0.448 0.087 0.535-0.0235-0.0137-0.0372 0.2300 30 24 40.69 31.95 42.99 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.697 0.296 0.500 0.894 0.099 CMLS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B CMS CMUS CNUS CNLS CNS 2Y/B 0.347 0.168 0.454-0.0450-0.0227-0.0676 37.96 46.08 39.89 0.651 0.134 X/C 0.0990.264 0.275 0.436 0.099 0.536-0.0344-0.0257-0.0602 32.89 50.92 36.23 0.653-0.004 0.399 0.311 0.469 0 0.003 -0.0843 504 3.093 0.597-0.0285-0.0287-0.0572 30.66 55.85 34.58 0.597-0.108 -0.3280.563 0.076 0.640-0.0298-0.0258-0.0556 30.30 58.72 33.69 0.503-0.141 0.006 -0.3010.697 -0.4890.01 -0.5720.584 0.014 0.598-0.0522-0.0153-0.0675 33.94 135.0 36.29 0.343-0.112 -0.445-0.547-0.226-0.868-0.8410.02 -0.525-0.799-0.706-0.982 -1.029-0.984-0.7910.03 -0.621WING LOWER SURFACE COEFFICIENTS -1.042 -1.084-0.7740.04 -0.612-1.0100.500 2Y/B 0.099 0.296 0.697 0.894 -0.9270.05 -1.164-1.161-1.089 -0.607X/C -0.595-1.057-0.9320.06 -1,179 -1.1420.546 0.546 0.546 0 0.546 -1.049 -1.165 -1,131 -0.9210.08 -0.5650.384 0.01

0.311 0.02 0.263 0.03 0.226 0.04 0.223 0.199 0.174 0.092 0.05 0.240 0.001 0.132 0.086 0.10 0.103 0.163 -0.0450.15 0.030 0.122 0.085 0.071 0.20 0.094 0.062 -0.0670.050 0.011 0.30 0.055 0.027 0.008 -0.021-0.1220.40 0.011 -0.014-0.036-0.1190.026 0.50 -0.005-0.018-0.0900.024 -0.0230.55 0.60 0.038 0.054 0.040 -0.0150.051 0.65 0.110 0.70 0.153 0.150 0.128 0.144 0.106 0.75 0.194 0.179 0.139 0.158 0.184 0.202 0.157 0.80 0.209 0.190 0.171 0.85 0.194 0.202 0.156 0.188 0.171 0.90 0.155 0.136 0.175 0.146 0.166 0.096 0.130 0.122 0.100 0.118 0.95 0.056 -0.0210.051 0.049 1.00 0.041

-1.132-0.937-0.862 -1.186 0.10 -0.540-0.951-0.804-1.178 -1.1480.125 -0.513-0.777 -1.171-0.9560.15 -1.179-0.5030.175 -0.498-0.708-1.022-0.976 -1.1670.20 -0.802-0.483-1.000-0.663-1,167 0.225 -0.475-0.629-0.719-1,163 -1.0190.25 -0.589 -0.456-0.676-1.129-1.0250.30 -0.557-1.087-0.450-0.652-0.8260.35 -0.730-0.442-0.522-0.617-1.167-0.5140.40 -0.595-0.748-0.957-0.436-0.6560.45 -0.492-0.585-0.444-0.6580.50 -0.456-0.527-0.553-0.578-0.4150.55 -0.500-0.428 -0.456-0.436-0.375-0.382 -0.3750.60 -0.347-0.395-0.357-0.329-0.312-0.2790.65-0.326-0.3170.70 -0.252-0.297-0.230 $-^{\circ}.242$ -0.2680.75 -0.250-0.230 -0.208-0.201-0.2110.80 -0.204-0.186-0.167-0.159-0.1860.85 -0.104-0.148-0.127-0.157-0.102-0.065 -0.043-0.123-0.083 0.90 -0.0480.95 -0.012 0.001 0.016 0.008 - 0.0770.041 0.056 0.051 0.049 -0.021 1.00

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

ID-PRESSOUT6

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORDI	WISE ROWS			NORMAL ROWS	
ROW ID	1A 1B 2	3 4A 4B 5A		ROW ID	A B C D	E F G H
	— · —				0 294 0 413 0 580 0 747 0	0.866 0.985 1.009 1.069
1/CR	000030000	.010 .101 .007 .10.	OC3. 101. C	X/ CIT	0.274 0.475 0.355 0.777	
Y Y/CR X X/CR 10.35 0.247 11.35 0.270 12.35 0.394 14.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.485 22.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.842 36.35 0.866 37.35 0.866 37.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938	-2.75 -1.25 -0.25 066030006 0.038 0.111 0.082 0.067 0.062 0.060 0.063 0.066 0.042 0.044 0.047 0.061 0.069 0.095 0.079 0.133 0.145 0.163 0.161 0.151 0.151 0.124 0.114 0.115-0.037	0.75	5 6.75 10.75 5 .161 .256 23 -0.331 -0.107 48 -0.302 -0.301 -0.326 -0.322 -0.311 -0.300 50 -0.295 -0.291 -0.291 -0.291 -0.291 -0.131-0.174 -0.153-0.157 -0.131-0.130 -0.106-0.120 -0.092-0.115 -0.079-0.093	Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 6.75 0.161 5.75 0.137 4.75 0.113	-0.373-0.366-0.356-0.2210.2290.402-0.415-0.370 -0.2350.2500.2430.248- 0.060 C.061 0.122 0.092 0.053 0.061 0.110 0.117	0.866 0.985 1.009 1.069 -0.121 -0.118 -0.130-0.063-0.130 -0.129-0.046 -0.328 -0.131-0.038-0.031-0.019 -0.123-0.038-0.000 0.006 -0.121-0.051-0.007-0.008 -0.137-0.032-0.001 0.019 -0.109-0.018 0.017 0.003 -0.102 0.013 0.025 0.009 -0.114 0.019 0.043 0.039
39.35 0.938 40.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.092	0.084-0.011 0.065 0.019 0.074 0.050 0.056 0.039	-0.005 -0.029 0.019 -0.032 0.043 -0.001 0.039 0.019	-0.079-0.093 -0.057-0.065 -0.038-0.063 -0.031-0.130 -0.019 0.063			
46.85 1.116	0.049 0.015					

FUN:SEQ 194:2

MACH 0.833		RN 6.82	PT 1532	P 972	TTR 546.6	Q 471	ALPHA .9 5.00	17 CNU	CNL 5 0.08	CN 5 0.53	 1-0	CMU .021	9-0.	CML 0136	CM	DEFFICIE CB 0.2279	XCPU X	CPL XCP .95 31.7	YCP 0 42 .93	TAU CF 0.000 0.00
2Y/B 0.099 0.296 0.500 0.697 0.894 2Y/B X/C 0 0.01 0.02 0.03 0.04	2.999 CNUS 0.349 0.445 0.553 0.571 WIN 0.099 0.545	CNL 0.10 0.09 0.07 0.01 G LOW 0.2	1532 WING S 0.4 0.5 7 0.5 7 0.6 9 0.5 ER SU 96	972 SECT 49-0. 49-0. 30-0. 90-0. RFACE 0.500 0.396 0.396 0.273 0.245	10N C NUS 0444- 0369- 0261- 0291- 0481- 0.00	471 OEFF CMLS 0.019 0.029 0.029 0.019 FICIE 697	.9 5.00 ICIENTS S CMS 96-0.063 51-0.062 96-0.054 59-0.064 ENTS 0.894	17 CNU 0.446 XCPUS 9 37.71 0 33.26 7 30.27 1 30.26	XCPLS 44.56 51.57 55.70 57.40	XCPS 39.24 36.48 34.42 33.58	CI 0.0	NC/ 644 659- 591-	9-0. CMC 0.13 0.00 0.10	0136 7 89 86 89	CM	CB 0.2279	XCPU X 29.92 40 IG UPPER		0 42.93	0.000 0.00
0.05 0.10 0.15 0.20 0.30 0.55 0.65 0.75 0.85 0.95 1.00	0.239 0.163 0.122 0.094 0.052 0.024 0.001 0.038 0.128 0.151 0.159 0.155 0.136 0.083 0.037	0.2 0.1 0.0 0.0 0.0 0.0 -0.0 0.1 0.1 0.1 0.1	24 78 48 18 09 - 03 - 50 52 77 83 87 55 08	0.213 0.110 0.066 0.041 0.005 0.012 0.005 0.120 0.120 0.130 0.202 0.176 0.130 0.062	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	186 090 033 018 013 027 037 034 138 177 195 191 167 123 046	0.083 0.013 -0.033 -0.059 -0.105 -0.106 -0.096 -0.004 0.141 0.158 0.161 0.157 0.094 -0.030								0.20 0.25 0.25 0.35 0.45 0.55 0.65 0.75 0.85 0.95 1.00	-0.498 -0.493 -0.465 -0.455 -0.430 -0.424 -0.429 -0.380 -0.369 -0.320 -0.288 -0.260 -0.208 -0.153 -0.079 -0.010 0.037	-0.671 -0.619 -0.594 -0.567 -0.521 -0.507 -0.477 -0.477 -0.444 -0.387 -0.316 -0.272 -0.239 -0.183 -0.122	-0.766 -0.710 -0.667 -0.619 -0.581 -0.571 -0.534 -0.479 -0.416 -0.367 -0.310 -0.270 -0.213 -0.165 -0.105 -0.052 0.019 0.062	-1.189 -1.173 -0.990 -0.714 -0.689 -0.671 -0.622 -0.527 -0.451 -0.347 -0.291 -0.247 -0.205 -0.163 -0.114 -0.057 -0.001 0.046	-1.019 -1.036 -1.043 -1.101 -1.171 -0.769 -0.569 -0.496 -0.379 -0.337 -0.298 -0.261 -0.246 -0.208 -0.170 -0.136 -0.087 -0.030

			CHORE	DWISE F	ROWS								N	ORMAL	ROWS	enter de la companya de la companya La companya de la co			
ROW ID		_18 <u>∈</u>			4A	48	5A	5B	6	ROW	ID -	A	В	C	D	Ε	F	G	H
	-2.75					3.75	7.75	6.75	10.75	_		12.35	17.35	24.35	31.35	36,35	41.35	42.35	44.85
Y/CR	066	030	006	.018	. 101چي	.089	.185	.161	.256	X/	CR	0.294	0.413	0.580	0.747	0.866	0.985	1.009	1.069
V · · · · · · · · · · · · · · · · · · ·	r T		<i>₹</i>	·	· C.									***				· · · · · · · · · · · · · · · · · · ·	
X X/CR	0 007	•	برب س	<u>.</u> .c					· · · · · · · · · · · · · · · · · · ·	1 4 Y	Y/CR	<u> </u>					•	-2 5	
10.35 0.247		-			-0.389	·					0.399			-0.313	-0.193	1-0.150			ri Vitalian esta esta esta esta esta esta esta esta
	0.107			,	-0.384	-					0.328	•				2-0.134			
12.35 0.294	0.074	3			-0.405	•	-0.347	2	· ·		0.256		-0.333	-0.328	-0,251	-0.148	-0.078	-0.740	
14.35 0.342	0.071			* <u>~</u>	-0.402		÷			7.75	0.185	-0.347							-0.030
15.35 0.366	0.058	%* *			-0.395			•	<i>-</i> 0.335		0.161				-0.232	-0.142	-0.060	-0.039	-0.025
16.35 0.390	0.051			• • •	-0.388		0.050		-0.116	5.75	0.137	-0.394	-0.390	-0.363	-0.266	-0.143	-0.057	-0.050	-0.009
17.35 0.413	0.041		<u>-</u>	<i>1</i> √ √	-0.383		-0.353	- , -	-0.333		0.113	A.	Ć, it		-0.261	-G.148	-0.042	-0.040	-0.012
18.35 3.437	0.028	. -			-0.402	and the second s		`~	-0.325			-0.405	-0.383					- 5 6	eer oo jira
19.35 0.461	0.032	~	•	. ,	-0.388				-0.315		0.089								-0.020
20.35 0.485	0.036	ř		<u>.</u>	-0.393			:	-0.308		0.066								-0.001
22.35 0.533	0.043		÷ ,		-0.382			-	-0.320		0.042								0.011
23.35 0.556 24.35 0.580	0.039				-0.367				-0.328	the state of the s	0.018				-0.255	-0.134	0.017	0.032	2.042
25.35 0.604	0.046				-0.364		-0.337	T _e	-0.328		-0.006	"							0.031
26.35 0.628	0.053	•			-0.369		:		-0.312		-0.030		· , 9						0.054
27.35 0.652	0.070		*		-0.327			·	-0.285		-0.054				0.120	0.128	0.082	0.082	0.070
30.35 0.723	0.072		·		-0.330			-	0.004	and the second s	-0.066		0.041	0.046				· .	
31.35 0.747		0 120		Λ <u>Э</u> ΕΕ	-	0 25/	A 222	0 00	-0.234		-0.077				0.119	0.115	0.075	<u>0</u> :073	0.053
32.35 0.771		0.138 0.149		-0.255					2-0.251		-0.101	0.086	0.065	0.050	0.112	0,117	0.078	0.081	0.047
33.35 0.795				-0.219		-0.223	_		4-0.228		-0.125			5	0.107	0.110	0.079	0.092	0.054
34.35 0.818		0.155 0.145		-0.193		-0.217	_	_	5-0.199		-0.149					0.096			-0.044
35.35 0.842		0.143		-0.176		-0.182			7-0.165	•	-0.220					0.080	0.092	\$	C =
36.35 0.866		0.146		-0.147		-0.160			9-0.147				0.069	and the second s		0.684		<u>.</u>	
37.35 0.890	• •	0.129		-0.134	•	-0.146				-15.25	-0.363			0.087	0.073	0.079	*		े इंट
38.35 0.914		6.103		-0.106	,	-0.122			3-0.116			• •	:				· •	in the second of	
39.35 0.938				-0.077 -0.0 4 8		-0.079			D-C.108	•		:		,				•	
40.35 0.961				-0.046 -0.013		-0.070			3-0.111			· · · ·	r	` .					
41.35 0.985			· ·	0.013		-0.055			5-0.100		·	•	1			<u>.</u>	t	; ;; ;	
42.35 1.009			=	0.012		-0041 -0031			0-0.078	*	,			*	•			• 2 -	
44.85 1.069				0.032		-0.031 -0.020			9-0.140		.*.		*				<u> </u>	<u>:</u>	
45.85 1.092				0.038		0.020	, ,	U.UZ:	5-0.071		·			·	-		*.	·	
46.85 1.116				0.030			;				*		•				·	t	
		J. 007	J.J.7	J. 0, 17					•	4 *		•	•	,			•		

RUN SEQ 195.2

0.75

0.80

0.85

0.90

0.95

1.00

0.165

0.176

0.157

0.128

0.079

0.020

0.169

0.191

0.187

0.152

WING COEFFICIENTS Q ALPHA CONF MACH RN/L XCPU XCPL XCP CB 989 546.8 467.9 5.00 17 CNU CNL CHL CMJ' CM 0,822 2,999 6,82 1541 0.442 0.086 0.527-0.0207-0.0138-0.0345 0.2257 29.70 41.06 31.55 42.79 WING UPPER SURFACE COÉFFICIENTS WING SECTION COEFFICIENTS 0.697 0.894 0.296 0.500 CMS XCPUS XCPLS XCPS CNC/ CMC/ 0.099 2Y/B CNUS CNLS CNS CMLS CMUS 2Y/B 0.348-0.100 0.448-0.0432-0.0202-0.0634 37.40 45.32 39.16 0.642 0.139 0.443 0.091 0.535-0.0372-0.0233-0.0605 33.39 50.54 36.32 0.652-0.005 0.501 0.092 0.593-0.0271-0.0275-0.0545 30.41 54.77 34.20 0.593-0.105 X/C 0.453 0.275 0.223 0.370 O-0.003 -0.1350.540 0.087 0.627-0.0280-0.0270-0.0550 30.18 55.92 33.77 0.494-0.139 0.006 -0.356-0.3860.697 -0.639 0.01 -0.6090.544 0.024 0.568-0.0450-0.0161-0.0610 33.28 90.82 35.75 0.326-0.105 -0.504-0.2660.02 -0.863-0.940-0<u>-</u>923 -0:562 -0.963 -1.098 -1.059 -0.859 0.03 -0.652WING LOWER SURFACE COEFFICIENTS -1.101 -1.155 -1,085 0.04 -0.645-0.2838 0.697 0.894 0.2% 0.500 2Y/B 0.099 -1.232-1.243-0.645-1.1440.05 X/C -1.105 -1.250 -0,613 -1.213 -0.999 0.050.544 0.544 0.544 0.544 0 -1.227. -1.193 -0.966 0.08 -0.589-1.086 0.395 0.01 -1.247 -0.558-0.883-1.205 0.10 0.319 0.02 -0.894 -1.237 -1.206 -0.527-0.985 s 0.125 0.272 0.03 -0.780 - 1.208-0.981-0.520 -1.2330.15 0.235 0.04 -0.718 -0.844-1-212 -0.5130.175 0.05 0.205 0.190 0.225 0.218 0.106 -1.206 -0.668 < -0.754-0.5050.200.10 0.099 0.1540.128 .0.107 0.011 -0.607 -0.702 -0.940-0.490-1.0130.225 [0.075]0.15 0.044 -0.0300.080 0.120 0.25 -0.569 -0.668 -0.755 -1.010-0.4610.20 0.048 0.028 -0.0560.085 0.044 -0.5460.30 -0.635 -0.464-0.674 -0.875 0.30 0.000 0.005 -0.0890.054 0.024 -0.504-0.583 -0.440-0.659 -0.3120.35 0.40 -0.009-0.005-0.0890.023 0.010 -0.492-0.555-0.439-0.641-0.7300.50 -0.081 0.400.013 -0.011-0.013-0.025-0.475-0.608-0.586 0.45 -0.414-0.5300.55 -0.527 -0.484-0.4810.50 -0.390-0.4230.60 0.039 0.028 0.0630.049 - 0.011-0.404 -0.3990.55-0.378-0.438 -0.4170.65 0.116 -0.361-0.341-0.366-0.3730.60 -0.366 0..43 0.153 0.70 0.104 0.123 0.139

-0.318

-0.275

-0.244

-0.200 -0.192 -0.176

-0.004

0.047

-0.315

-0.283

-0.218

-0.149 -0.142 -0.119 -0.114 -0.163

0.018

0.056

-0.197 -0.053 (-0.049 -0.119

-0.306

-0.283

-0.254

-0.085

0.020

₹ -0.017

0.70

0.75

0.80

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0.90

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*-*0.307 *-*0.313

-0.163 -0.206

0.012 -0.069

0.046 - 0.004

°-0.274

-0.247

-0.258

-0.210

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

0.179

0.197

0.197

0.172

0.183

0.201

0.198

0.164

0.100 0.114 0.132 0.085

0.047 0.056 0.046 -0.004

0.142

0.154

0.164

0.140

CHORDWISE		NORMAL ROWS ROW ID A B C D E F G H
Y -2.75 -1.25 -0.25 0.75	4.25 3.75 7.75 6.75 10.75	10 0F 17 0F 04 0F 0F 0F 14 0F 45 0F 45 0F
ROW ID Y -2.75 -1.25 -0.25 0.75 Y/CR066030006 018 X X/CR 10.35 0.247 0.016 11.35 0.270 0.088 12.35 0.294 14.35 0.342 0.071 15.35 0.366 0.054 16.35 0.390 0.038 17.35 0.413 0.057 18.35 0.437 0.049 19.35 0.461 0.048 20.35 0.485 0.032 22.35 0.533 0.029 23.35 0.556 0.036 24.35 0.580 0.038 25.35 0.604 0.041 26.35 0.628 0.063 27.35 0.652 0.078 30.35 0.723 31.35 0.747 0.132 -0.24 32.35 0.771 0.128 -0.21 33.35 0.795 0.137 -0.20 34.35 0.818 0.135 -0.17 35.35 0.842 0.136 -0.16 36.35 0.866 0.128 -0.12 37.35 0.890 0.115 -0.10 38.35 0.914 0.095 -0.06 39.35 0.938 0.105-0.043-0.02 40.35 0.961 0.073-0.014-0.01 41.35 0.985 0.051 0.024 0.00	4A 4B 5A 5B 6 4.25 3.75 7.75 6.75 10.75 3 .101 .089 .185 .161 .256 -0.397 -0.397 -0.415 -0.355 -0.412 -0.403 -0.357 -0.297 -0.86 -0.371 -0.303 -0.371 -0.303 -0.366 -0.357 -0.287 -0.352 -0.297 -0.287 -0.366 -0.357 -0.287 -0.352 -0.297 -0.287 -0.368 -0.374 -0.224 -0.308 -0.277 -0.30	ROW ID X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069 Y Y/CR 16.75 0.399
42.35 1.009 0.047 0.026 0.01 44.85 1.069 0.023 0.012 0.01 45.85 1.092 0.029 0.022 0.01 46.85 1.116 0.038 0.012 0.02	-0.018 -0.034-0.131 -0.001 -0.043-0.065	

WING COEFFICIENTS

RUN SEQ 196.2

MACH RN/L

XCPU XCPL XCP CM CMU CML CB 0.810 2.997 6.82 1551 1007 546.5 462.3 5.00 17 CNU CNL CM 0.426 0.092 0.518-0.0190-0.0140-0.0330 0.2220 29.45 40.27 31.37 42.89 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.697 0.394 0.500 XCPUS XCPLS XCPS 0.296 0.099 CNC/ CMC/ 2Y/B CMUS CMLS CMS CNUS CNLS CNS 2Y/B 0.336 0.107 0.443-0.0395-0.0215-0.0610 36.78 45.06 38.73 0.635 0.141 X/C 0.0990.207 0.4420.352 0.261 0.409 0.103 0.512-0.0280-0.0262-0.0542 31.84 50.45 35.57 0.625 0.001 0 -0.1540.487 0.095 0.583-0.0269-0.0281-0.0549 30.51 54.42 34.43 0.582-0.104 0.0030.500 -0.380-0.4120.536 0.086 0.622-0.0289-0.0264-0.0553 30.40 55.70 33.89 0.489-0.138 **3006**.0 0.697 -0.291 -0.525 0.539 0.029 0.568-0.0463-0.0162-0.0625 33.58 80.74 36.00 0.026-0.106 -0.640-0.673 40.00.894-0.974-0.949-0.891-0.804-0.582 0.02-1.141 -1.093 -0.888-0.669-1.066 0.03WING LOWER SURFACE COEFFICIENTS -1.193 -1.119 -0.865 0.04 -0.660 -1.125 0.500 0.697 0.894 0.099 0.296 -1.161 -1.268 -1.269 -0.646-1.013 0.05X/C -1.282 -1.250 -1.018-0.620-1.101 0.542 0.06 0.542 0.542 0.542 0.542 -1.256-1.226 -0.589 -0.972 -1.000 0.080.01 0.409 -1.267 -1.227 -1.009-0.856-0.5600.40 0.328 C.02-1.006-1.253 -1.235 -0.532-0.7840.125 0.278 2.03 -0.518-0.949 -1.255 -0.740-0.996 **0.15** 0.247 0.04 -0.503 -1.228 -0.778-0.993 -0.6760.175 0.104 0.050.219 0.195 0.241 0.226 -0.490 -0.630 -1.032-0.718-0.975 0.20 0.138 0.030 0.10 0.176 0.120 0.103 -0.477-0.578-0.670-0.738-0.311 0.225 0.048 -0.0120.064 0.15 0.139 0.098 -0.801-0.547-0.633-0,666 0.25-0.445-0.0420.072 c0.041 0.029 0.093 0.20-0.620-0.7680.30 -0.445-0.512-0.6630.006 -0.0060.028 -0.0860.0630.30-0.417-0.570-0.8060.35-0.468-0.6520.010 - 0.001-0.023-0.0850.033 0.40 0.40 -0.410 -0.440-0.535-0.632 -0.824-0.006-0.005-0.016-0.073 0.500.011-0.597-0.373-9.425-0.483-0.7730.450.55 -0.452-0.5370.052 0.50-0.361-0.391-0.4570.0550.053 -0.0060.042 0.60 -0.594-0.347 -0.359 -0.4210.55-0.4570.65 0.112 -0.356-0.394-0.335 -0.3650.60. **−**0.335 0.154 0.108 0.153 0.70 0.124 0.155 -0.297-0.324-0.311-0.327-0.2930.650.750.1820.1420.191 0.183 0.165 -0.274-0.251-0.266 -0.268-0.2670.700.194 0.204 0.205 0.161 0.170 0.80-0.226-0.211-0.242-0.2160.75 -0.237 0.206 0.194 0.155 J.85 9.163 0.191 -0.184-0.177 ∴-0.160 -0.199 **0**.50 -0.1960.162 0.134 0.150 0.90 0.149 0.171 -0.125-0.124 -0.1140.093 0.85 -0.160-0.1360.121 0.95 0.0970.113 0.121 -0.060 -0.054 -0.077 -0.066 $0.047 \quad 0.045 \quad -0.019$ 0.9009024 0.053 1 00 0.004 -0.035 0.003 0.95 -0.0110.004 0.053 0.045 -0.019 0.024 0.047

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

ID-PRESSOUT6

Q ALPHA CONF

~ .		CHORD	WISE RO	IWS.	/				_	NORMAL			-		
ROW ID	1A1E	•	3	4A	4B 5/	. –	B 6	ROW ID	A E	3E 34 3E	31 35 34 D	E 35 1	F 1 35 0	G 12 35 A	H 14 95
Y Y/CR	-2.75 -1.2 06603			-	3,75 7,1 ,089 ,18	/b 6. 35 .1	.75 10.75 61 .256	X X/CR	0.294 0.4	113 0.580	0.747 0	.866 0	.985 1	.009	1.0€9
17CK		.000	.010	.101			.230								
X X/CR		,	·	A 200	-		÷	Y Y/CR 16.75 0.399	•	-n 296	0-0.197-0	1 132		•	,
10.35 0.247 11.35-0.270				0.388 0.373	<i>(</i>			13.75 0.328	- · · ·	291-0.25					· •
12,35 0,294		'		0.405	-0.3			10.75 0.256	-0.	301-0.28					
14.35 0.342		•		0.389		5		7.75 0.185	-0.347-0.	.363-0.29	7-0.219-0).141-().122	0.078		-0.047
15.35 0.366				0.384			-0.329 -0.120	6,75 0,161 5,75 0,137	_0_379_0	395_0 319	-0.216-0), 133-1 1 129-1	J.U47- N.052-	0.030- 0.031	-0.032 -0.033
16,35 0,390 17,35 0,413				0.381 0.371	-0.3	363	-0.301	4.75 0.113		, 373- <u>0</u> , 31.	-0.236-0).133-	0.038-	0.027	-0.015
18.35 0.437				0.364	•	-	-0.301	4.25 0.101		371-0.32	4				
19.35 0.461			_	-0.385			-0.295	3.75 0.089			-0.227-0		-		
20.35 0.485				0.374			-0.293	2.75 0.066			-0.231-0 -0.242-0				
22.35 0.533		.,7		0.332 0.334			-0.305 -0.297	1.75 0.042 0.75 0.018			-0.242-0				
23.35 0.556 24.35 0.580				0.324	-0.3	297	-0.284	-0.25-0.006	."		0,2 -40		_	0.030	_
25.35 0.604				0.305		_ /	-0.270	-1.25-0.030	•		0.130			- , ,	
26.35 0.628				0.291			-0.260	-2.25-0.054	• •	044 2 05	0.146).118 (0.0/4	0.0/9	0.054
27.35 0.652		J	. ,	0.286	:11	•	-0.227	-2.75-0.066 -3.25-0.077	U.	.044 0.05	0.108(า 11 9 ัส	በ በሐሐ	0 070	0.050
30.35 0.723 31.35 0.747		30	-0.240		0 227-6 :	219-0	.216-0.205	-4.25-0.101	0.078 0.	.057 0.049					
32.35 0.771			-0.204		0.228		207-0.194	-5.25-0.125			0.089	0.100	0.077	0.077	0.044
33.35 0.795	0.1	50	-0.205		0.226		.178-0.167	-6.25-0.149		.065 0.04				•	-0.053
34.35 0.819			-0.178		0.184		.160-0.182	-9.25-0.220		.071 0.05 .065 0.05			0 0/3		
35.35 0.842 36.35 0.866			-0.150 -0.134		0.150 0.135		.148-0.160 .133-0.144	-12,25-0,292 -15,25-0,363			0.061				
37.35 0.890			-0.110		0.122		103-0.108	.3.23 0.000		0,00					
38.35 0.914	0.1	105	-0.067	_	0.097		.095-0.098	•							
39.35 0.938		080.0-930			0.064		.077-0.090								
40.35 0.961)62-9.015)50 0.019			0.033 0.039		.061-0.073 .047-0.078								
41.35 0.985 42.35 1.009		069 0.030			0.032		.030-0.154								
44.85 1.069	0.0	0.027	0.020		0.024		.032-0.073								
45.85 1.092		0.033								,					
46.85 1.116	0.0	0.009	0.012												
	NATTONAL I	ACCOMAINTE	CC: AND	CDACE	ADMINITCE		NI.								

WING COEFFICIENTS

RUN SEQ 197.2

Q ALPHA CONF MACH RN/L XCPU XCPL XCP 6.82 1558 1022 546.4 358.5 5.00 17 CNU CNL CN CMU 0.801 2.996 0.417 0.092 0.509-0.0173-0.0145-0.0317 0.2173 29.15 40.75 31.24 42.72 0.009 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.500 0.099 CMUS CMS XCPUS XCPLS XCPS CMLS CNUS CNLS CNS 2Y/B 0.330 0.107 0.437-0.0377-0.0231-0.0608 36.40 46.60 38.90 0.627 0.138 X/C 0.099 0.245 0.408 0.103 0.511-0.0281-0.0265-0.0546 31.89 50.70 35.68 0.624 0.000 0 0.296 -0.1770.003 0.470 0.097 0.567-0.0235-0.0270-0.0505 30.00 52.77 33.90 0.567-0.099 0.500 -0.439-0.4080.519 0.084 0.603-0.0295-0.0258-0.0552 30.67 55.58 34.15 0.475-0.135 0.006 0.697 0.523 0.032 0.555-0.0465-0.0165-0.0630 33.89 76.49 36.35 0.319-0.104 -0.706 -0.607 0.01 -0.669-0.984-0.829-0.921-1.0070.02 -0.590-1.128-0.910 -1.075-1.176-0.673 0.03 WING LOWER SURFACE COEFFICIENTS -1.224 -1.150-0.879-1.1450.04 -0.6600.296 0.894 0.500 0.697 2Y/B 0.099 -1.295-1.303 -1.0440.05 -0.650-1.171X/C -1.281 -1.314-1.047 0.06 -0.629-1.1100.541 0.541 0.541 0.541 0 -1.276-0.598-0.951-1.248-1.0150.08 0.412 0.01 -1.284-0.570-0.869-1.240-1.0070.10 0.333 0.02 -0.791-1.235-1.257-0.9870.125 -0.5420.03 0.282 -1.255-0.707-0.801-0.906-0.5260.15 0.254 0.04 -0.858-0.751-0.7220.175 -0.647-0.5110.222 0.05 0.197 0.111 0.2290.213 -0.711-0.639-0.603-0.6740.20 -6.4800.123 0.104 0.153 0.147 0.037 0.10 0.225 -0.654-0.582-0.467-0.645-0.6630.077 0.046 0.098 -0.0080.15 0.114 -0.7000.25 -0.555-0.629-0.657-0.4390.058 0.025 -0.0340.200.063 0.090 -0.500-0.575-0.849-0.6680.30 -0.431-0.086-0.0080.029 0.013 0.300.063 -0.482-0.533-0.6520.35 -0.938-0.403-0.078-0.0230.018 0.002 0.400.032 -0.925-0.442-0.500 -0.625-0.3850.400.50 -0.0140.014 -0.000-0.006-0.068 -0.591-0.6130.45 -0.411-0.476-0.3870.55 0.50 -0.389*-*0.53∜ -0.357-0.444-0.4300.052 -0.0040.50 0.0560.0600.050 0.55 -0.355-0.391-0.454-0.329 -0.4020.109 0.65-0.318-0.301-0.350-0.367-0.3620.60 0.150 0.146 0.70 0.130 0.155 0.101 -0.296-0.299-0.307-0.3160.65 -0.2820.1850.1900.135 0.75 0.176 0.180 -0.251-0.2730.70 -0.261-0.253 -0.2610.155 0.137 0.192 0.202 0.189 0.80 -0.2210.75 -0.239-0.219-0.222-0.2440.199 0.159 0.85 0.164 0.192 0.184 0.80 -0.209-0.198-0.171-0.173-0.1770.156 0.136 0.90 0.146 0.157 0.165 -0.112-0.121-0.1590.85 -0.139-0.1240.103 0.113 0.121 0.95 0.0970.120 -0.070-0.053-0.054-0.117-0.072-0.0110.046 0.046 0.019 0.036 1.00 -0.004-0.006 800.0 -0.011-0.068 0.046 0.046 -0.011 0.019 0.036

ROW ID Y Y/CR	_ • •	WS 4A 4B 5A 5B 6 4.25 3.75 7.75 6.75 10.75 .:01 .089 .185 .161 .256	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.366 16.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.628 27.35 0.628 27.35 0.723 31.35 0.723 31.35 0.747 32.35 0.771 33.35 0.795 34.35 0.866 37.35 0.866 37.35 0.890 38.35 0.914 39.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.985 42.35 1.069 45.85 1.069 45.85 1.092 46.85 1.116	0.076 0.078 0.069 0.062 0.042 0.038 0.041 0.038 0.037 0.044 0.067 0.067 0.067 0.067 0.072 0.067 0.131 0.162 0.142 0.161 0.162 0.149 0.156 0.125 0.130 0.119 0.109 0.109 0.109 0.093	0.387 0.379 0.386 -0.326 0.393 0.387 -0.306 0.360 -0.126 0.363 -0.294 0.348 -0.275 0.338 -0.273 0.301 -0.249 0.311 -0.255 0.300 -0.284 -0.261 0.293 -0.254 0.280 -0.255 0.280 -0.157 -0.183-0.185 -0.157 -0.183-0.180 -0.161 -0.166-0.137 -0.157 -0.144-0.146 -0.125 -0.116-0.122 -0.097 -0.118-0.125 -0.079 -0.099-0.122 -0.079 -0.099-0.122 -0.066-0.095 -0.027 -0.066-0.095 -0.007 -0.012-0.060	Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 -0.283-0.261-0.183-0.126 10.75 0.185 -0.326-0.332-0.284-0.188-0.122-0.087-0.131 7.75 0.185 -0.326-0.332-0.284-0.188-0.122-0.087-0.131 5.75 0.181 -0.223-0.116-0.051-0.033-0.012 5.75 0.137 -0.363-0.347-0.295-0.208-0.108-0.055-0.020-0.020 4.75 0.113 4.25 0.101 -0.386-0.364-0.300 3.75 0.089 2.75 0.066 1.75 0.018 -0.215-0.125-0.027-0.009-0.007 2.25-0.066 -0.221-0.099-0.026 0.020 0.006 1.75 0.018 -0.226-0.119 0.008 0.030 0.044 -0.25-0.006 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 -0.084 0.053 0.063 0.109 0.110 0.078 0.078 0.053 -5.25-0.125 -6.25-0.129 -9.25-0.220 -12.25-0.220 -12.25-0.220 -15.25-0.363

RUN:SEQ 198:2

	RN/L 2.982	RN P1 6.78 149		TTR 6 543,2 473	ALPHA (3.8 5.00	17 CNU				U (WING CO CML CM 0128-0.0436	OEFFICI CB 0.2363	XCPU)	KCPL XCF	YCP - 10 43.10	TAU 0.00.0
2Y/B 0.099 0.296	0.358	CNLS 0.104 (CNS CI),461-0,(ION COEFF MUS CML 0506-0:02 0415-0:02	S CMS 106-0.071	2 39, 17	44.81	40.44	0.661	CMC/ 0.131	Υ/ſ	0.099		0.500	0.697	0.894
0.500 0.697 0.894	0.539 0.593 0.587	0.085 0 0.073 0 0.011 0),624-0,(),666-0,(),598-0,(0389-0.02 0390-0.02 0628-0.01	81-0.0670 67-0.0650 53-0.0782	32,21 31,58	58.03 61.29	35.73 34.85	0.624	-0.120 -0.152	0.003	-0.205 -0.502	-0.413	0.328 -0.052 -0.262 -0.502 -0.820	0.286 -0.289 -0.525 -0.793	0.296 -0.443 -0.655
2Y/B X/C 0	0.099 0.547	0.296 0.547	0.500 0.547	0.547	ENTS 0.894 0.547	B ≥					0.03 0.04 0.05 0.06	-0.601 -0.591 -0.586 -0.569	-0.936 -0.999 -1.044	• -	-0.933 -0.958 -1.098 -1.092	-0.740 -0.724 -0.881 -0.892
0.01 0.02 0.03 0.04			0.376 0.306 0.259 0.223								0.08 0.10 0.125 0.15	-0.544 -0.525 -0.503 -0.486	-1.011 -0.859 -0.774	-1.120 -1.143 -1.141 -1.139	-1.072 -1.087 -1.106 -1.135	-0.875 -0.893 -0.909
0.05 0.10 0.15 0.20	0.7 5 0. 7 0.123 0.092	0.209 0.119 0.078 0.051	0.189 0.101 0.054 0.030	0.075 0.026	0.065 0.001 -0.045 -0.069						0.175 0.20 0.225	-0.482 -0.486 -0.478	-0.709 -0.668	-1.116 -0.923 -0.776	-1.123 -1.125 -1.123	-0.917 -0.931 -0.961 -0.980
0.30 0.40 0.50 0.55	0.059 0.031 0.005	0.015 -0.006 -0.020	-0.006 -0.027 -0.037	-0.030 -0.045	-0.121 -C.124 -0.104						0.30 0.35 0.40	-0.457 -0.444 -0.447	-0.572 -0.551 -0.545	-0.677 -0.651 -0.652	-1.076 -0.775 -0.753	-1.054 -1.138 -0.759
0.60 0.65 0.70 0.75	0.039 0.117 0.156	0.040 0.147 0.178	0.061 0.114 0.157 0.191	0.041 0.140 0.177	-0.011 0.107 0.148		-				0.50 0.55 0.60	-0.454 -0.448 -0.424 -0.402	-0.467 -0.442	-0.642 -0.626 -0.596 -0.556	-0.757 -0.744 -0.649 -0.381	-0.651 -0.627 -0.587 -0.527
0.80 0.85 0.90 0.95	0.176 0.180 0.136 0.084	0.185 0.185 0.150 0.102	0.203 0.200 0.176 0.128	0.202 0.205 0.171 0.128	0.166 0.165 0.142 0.088						0.70 0.75 0.80	-0.364 -0.330 -0.274 -0.219 -0.156	-0.397 -0.297 -0.254 -0.186 -0.128	-0.362 -0.244 -0.199 -0.170	-0.265 -0.227 -0.201 -0.162	-0.405 -0.325 -0.260 -0.209
1.00	0.024	0.042	0.053	0.049	-0.067						0.90	-0.082 -0.015 0.024	-0.128 -0.063 -0.007 0.042	-0.117 -0.054 0.008 0.053	-0.111 -0.042 0.014 0.049	-0.170 -0.119 -0.086 -0.067

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

			CHORE	WISE F	ROWS									NORM/	AL RO	_	_	_	•	~
ROW ID	1A -2.75	18	2 -0.25	3 0.75	4A 4.25	4B 3,75	5A 7 5	58 6,75	6 10.75	5	RCW ID X	A 12 35	B 17.35	C 24.3	35 31	ก วิ35 (E 36,35 (F 41.35 -	G 42,35	H 5 44 .85
Y/CR	066			.018	.101	.089	. 185	.161			x2CR	0.294	0.413	0.58	30 0.	747 (0.866).985	1.009	1.069
X X/CR											Y Y/CR									
10,35,0.247	0.015				-0.384						16.75 0.399 13.75 0.328		_0_20			-	-0.182 -0.167			
11.35 0,270 12.35 0,294		-			-0.391 -0.400		-0.352				10.75 0.326						-0.149	-0.099	-0.15	51
14.35 0.342	-				-0.396		0.052				7.75 0.185				395-0	.284	-0.155	-0.072		-0.052
15:35 0.366	0.058	r Ta			-0.399				-0.34		6.75 0.161				_			- -		1-0.038
16.35,0.390	0.052				-0.421		0 200		0.87		5.75 0.137	-0.388	-0.41	9-0.4					_	4-0.035
17.35 0.413 18.35 0.437	0.050 0.044				-0.419 -0.420		-0.380		-0.34		4.75 0.113 4.25 0.101	-0.400	-0 41	9-0 4	_	, 200	יכינו . ט-	-0.050	-0.01	4-0.033
19,35 0,461	0.043	,			-0.427				-0.34		3.75 0.089	0.400	1741	, , ,		.286	-0.164	-0.044	-0.03	20-0.009
20.35 0.485	0.039				-0.430				-0.33	36	2.75 0.066									4-0.006
22.35 0.533					-0.425				-0.34		1.75 0.042									0.003
23.35 0.556	0.035				-0.410 -0.413		-0.395		-0.34		0.75 0.018 -0.25-0.006				- <u>(</u>	1.204	-0,136			22 0.035 30 0.034
24.35 0.580 25.35 0.604	0.044 0.043				-0.404		-0.375		-0.3		-1.25-0.030				C	131	0.140			7 0.044
26.35 0.628	0.054				-0.375				-0.3		-2.25-0.054				_	-				9 0.056
27.35 0.652					-0.351		•				-2.75-0.066		0.05	0.0						0 0 0 0
30.35 0.723				6 050		0.004	0.204	0 27	-0.28		-3.25-0.077	0.001	0.05	:o	_					8 0.062
31,35 0,747		0.131		-0.259 -0.235		-0.286 -0.256	-0.284-		7-0.2. 4 -0.2		-4.25-0.101 -5.25-0.125	0.081	0.00	0.U						0.045 2 0.054
32.35 0.771 33.35 0.795		0.14		-0.230		-0.2 4 9		- - -	4-0.2	_	-6.25-0.149	0.092	0.05	9 0.0				-		-0.037
34.35 0.818		0.146		-0.195		-0.214			4-0.19		-9.25-0.220		0.06	1 0.0	054 (0.084	0.074	0.071		
35.35 0.842		0.136		-0.162		-0.185					-12.25-0.292		0.09				0.067			
36.35 0.866		0.140		-0.138		-0.164			7-0.14		-15.25-0.363			0.0	J51 ().078	0.058			
37.35 0.890 38.35 0.914		0.120		-0.118 -0.076		-0.135 -0.091		-	7-0.12 5-0.1											
39.35 0.938			2-0.02€			-0.063			3-0.10											
40.35 0.961			5-0.013			-0.042		-	7-0.10											
41.35 0.985		-	0.019			-0.044			4-0.09											
42.35 1.009			7 0.030			-0.020			1-0.19 8-0.0											
44 .85 1.069 45 .85 1.092			4 0.034 3 0.031			-0.009	,	-0,03	J-U.U	7 44										
46.85 1.116			0.027																	
-																				

RUN-SEQ 199.2

MACH RN/L RN PT P TTR Q ALPHA CONF 0.852 2.990 6.80 1508 939 545.7 476.7 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF 0.451 0.037 0.538-0.0265-0.0137-0.0401 0.2332 30.87 40.72 32.46 43.34 0.000 0.00

z di		WING SECTI	ON COFFE	ICIENTS				-		•	WING	UPPER	SURFACE	COEFFICI	ENTS
2Y/B	CNUS CNLS				XCPUS	XCPLS	XCPS	CNC/	CMC/	2Y/B	0.099	0.296	0.500	0.697	0.894
0.099	0.340 0.107									X/C					
0.055	0.442 0.089	0.531-0.6	1379-0.02	35-0.0614	33 58	51 41	36 56	0 648-	-0 007	Ô	0.483	0.408	0.319	0.276	0.292
_ •	0.522-0.095	1) 617-0.0	1328-U US	82-0.0619	31 28	54 58	34 87	0.617-	-0.113	0.003	0.400		-0.068		
○0.500	0.560 0.086	0.017-0.0	1205-0.02	91-0.0007 91-0.0576	30 27	57.63	33 93	0.508	-0 144	0.006			-0.278	-0.305	
0.697	0.598 0.015	0.640-0.0	$1273^{-1} \cdot 0.02$	51-0.03/0 52-0.03/6	35 15	127 8	37.40	0.363	0.144	0.00	-0.216	-0.421	-0.519	-0.545	-0.458
0.894	0.590 0.015	0.613-0.0	0.01	55-0.0760	35.15	127,0	37.40	0.332	0.117	0.02	-0.508	-0.769	-0.839	-0.816	-0.678
	· UTNC LOUE	D CUDEACE	COFFETCI	ENTC						0.02	-0.606	-0.955	-1.000	-0.950	-0.764
2V - 12	,	R SURFACE								0.03	~0.591	-1.012	-1.053	-0.976	-0.748
2Y/B	0.099 0.29	6 0.500	0.697	0.894							-0.590	-1.059	-1.135	-1.124	-0.900
X/C	· · · · · · · · · · · · · · · · · · ·	7 0 547	0 547	0 547						0.05		-1.034	-1.147	-1.113	-0.909
0	0.547 0.54		0.547	0.547						0.06	-0.571		•		-0.891
0.01	and the second s	0.391								0.08	-0.549	-1.029	-1.137	-1.095	-0.912
0.02	,e	0.306		9		÷				0.10	-0.519	-0.866	-1.160	-1.108	
0.03		0.258		·: 						0.125	-0.499 s	-0.787	-1.156	-1.120	-0.924
0.0		0.233			. , -			4, 1		0.15	-0.486	-0.764	-1.154	-1.149	-0.936
0.0	0.240 0.20	_		0.090		-		4	Ċ	0.175	-0.475	<i>⊱</i> 0.707	-1.117	-1.136	-0.948
0.10	0.171 0.12		0.093	0.005		•	C			0.20	-0.472	-0.664	-0.849	-1.135	-0.974
0.15	0.136 0.08		0.036	-0.039				•		0.225	-0.453	-0.622	-0.749	-1.136	-0.998
0.20	0.098 0.04	9 0.060	0.025	-0.063						0.25	-0.438	-0.590	-0.702	-1.117	-1.007
<i>.</i> 0.30	0.060 0.01	7 0.024	-0.011	-0.119						0.30	-0.449	-0.559	-0.663	-0.888	-1.071
0.40	0.031 - 0.00	9 -0.011	-0 028	-0.114						0.35	-0.441	-0.534	-0.642	-0.718	-1.147
0.50	0.008 - 0.02	5 -0.010	-0.016	-0.095	•		.:			0.40	-0.438	-0.525	-0.642	-0.721	-0.927
0.55										0.45	-0.430	-0.506	-0.630	-0.709	-0.677
0.60	0.039 0.03	8 0.048	0.055	-0.013			- √7			0.50	-0.417	-0.493	-0.603	-0.643	-0.637
0.65		0.104	<i>:</i>							0.55	-0.396	-0.450	-0.557	-0.450	-0.592
0.70	0.126 0.14	5 0.149	0.155	0.098						0.60	-0.350	-0.413	-0.406	-0.351	-0.505
0.75	0.167 0.18		0.185	0.138						0.65	-0.312	-0.334	-0.313	-0.269	-0.437
0.80	0.180 0.18		0.203	0.154						0.70	-0.287	-0.268	-0.258	-0.223	-0.343
0.85	0.177 0.18		0.201	0.161						0.75	-0.245	-0.231	-0.197	-0.183	-0.242
0.90	0.140 0.14		0.172	0.144						0.80	-0.192	-0.185	-0.161	-0.140	-0.168
0.95	0.093 0.10		0.132	0.099						0.85	-0.143	-0.136	-0.106	-0.091	-0.142
1.00	0.028 0.04		0.060	-0.030						0.90	-0.086	-0.071	-0.047	-0.028	-0.113
,,,,	0.000		-,							0.95	-0.017	-0.011	0.017	0.023	-0.064
										1.00	0.028	0.041	0.059	0.060	-0.030
	4										- •	- -			-

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF, PRELIMINARY DATA

4 Car

ROW ID Y Y/CR	1A 1B 2 -2.75 -1.25 -0.25 0).75 4.25 3.75 7.75 6	58 5 5.75 10.75 161 .256	ROW ID X X/CR	NORMAL PJWS A B C D E F G H 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X	0.025 0.090 0.065 0.055 0.050 0.044 0.034 0.035 0.022 0.021 0.041 0.048 0.061 0.071 0.073 0.144 -0 0.144 -0 0.141 -0 0.139 -0 0.133 -0 0.133 -0 0.123 -0 0.105 -0 0.099-C.011-0 0.073 0.008 0 0.054 0.034 0 0.058 0.040 0 0.052 0.025 0	0.236	-0.335 0.729 -0.325 -0.329 -0.321 -0.328 -0.337 -0.326 -0.316 -0.325 -0.264 0.252-0.236 0.217-0.184 0.195-0.200 0.162-0.147 0.195-0.200 0.162-0.147 0.195-0.200 0.162-0.147 0.119-0.117 0.094-0.089 0.081-0.075 0.056-0.080 0.026-0.150 0.022-0.064	6.75 0.161 5.75 0.137 4.75 0.113	-0.315-0.241-0.132 -0.295-0.301-0.246-0.149 -0.325-0.326-0.236-0.143-0.080-0.150 -0.349-0.368-0.356-0.238-0.131-0.066 -0.043 -0.252-0.149-0.056-0.026-0.022 -0.378-0.384-0.377-0.245-0.141-0.064-0.023-0.028 -0.263-0.133-0.034-0.023-0.010 -0.398-0.400-0.386 -0.273-0.147-0.025-0.018-0.007 -0.253-0.151-0.030-0.002 0.019 -0.252-0.147-0.028 0.023 0.029 -0.255-0.129 0.023 0.038 0.031 0.034 0.040 0.023 0.136 0.133 0.054 0.058 0.041 0.142 0.142 0.083 0.081 0.063 0.082 0.056 0.041 0.110 0.130 0.081 0.070 0.057 0.104 0.119 0.091 0.082 0.047 0.090 0.067 0.046 0.107 0.119 0.088 -0.039 0.070 0.052 0.080 0.089 0.096 0.062 3.055 0.067 0.078

Q ALPHA CONF

P TTR

WING COEFFICIENTS

RUN.SEQ 200.2

MACH RN/L

0.779 2.991 6.81 1578 1057 546.4 448.8 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU 0.413 0.094 0.508-0.0155-0.0151-0.0306 0.2169 28.75 41.02 31.02 42.74 0.000 0.00 WING SECTION COEFFICIENTS WING UPPER SURFACE COEFFICIENTS CNUS CIVILS CNS CMUS CMLS 2Y/B CMS XCPUS XCPLS XCPS CNC/ CMC/ 2Y/B 0.099 0.296 0.5000.697 0.894 0.333 0.100 0.433-6.0381-0.0196-0.0576 36.41 44.61 38.30 0.621 0.142 0.099 X/C 0.411 0.101 0.512-0.0266-0.0250-0.0517 31.48 49.78 35.09 0.625 0.005 0.465 0.107 0.571-0.0234-0.0290-0.0525 30.04 52.26 34.18 0.571-0.101 0.2% 0.211 0 0.414 0.319 0.160 0.202 0.500 0.003 -0.2280.505 0.097 0.602-0.0277-0.0283-0.0560 30.49 54.20 34.31 0.473-0.135 0.697 -0.459 -0.500 0.006 0.506 0.042 0.548-0.0467-0.0181-0.0648 34.24 68.08 36.83 0.314-0.104 0.8940.01 -0.732 -0.771-0.332 -0.617-0.639-0.628 -0.977 0.02 -1.079 -1.058 -0.861WING LOWER SURFACE COEFFICIENTS -0.718 -1.171 0.03 -1.260 -1.198 -0.9222Y/B 0.099 0.296 0.697 0.894 o.500 -0.688 -1.202 -1,296 -1 216 0.04 -0.895 X/C -0.680 -1.2000.05 -1.375 -1.373 -1.1100.539 0.539 0.539 0.539 0.539 0 0.06 -0.644 -1.154 -1.371 -1.361 -1.0620.01 0.426 0.08 -0.610 -0.962 -1.319 -1.291 -0.7820.02 0.349 -0.573 0.10 -0.858 -1.317 -1.283 -0.6730.03 0.296 -0.552 0.125 -0.789-0.833 -1.194-0.7400.255 0.04 -0.5280.15 -0.724-0.757 -0.762-0.7950.05 0.229 0.232 6.220 0.207 0.125 0.175 -0.505-0.655 -0.708-0.708-0.8090.129 0.10 0.131 0.157 0.120 0.049 0.20 -0.608-0.487-0.674-0.707-0.8380.15 0.092 0.118 0.085 0.065 -0.000 0.225 -0.583 -0.469-0.646-0.683-0.8580.20 0.065 0.068 0.0910.043 -0.026 0.25 -0.438-0.552 -0.621-0.679-0.8390.30 0.061 0.032 0.036 0.012 -0.0650.30-0.434-0.513 -0.591-0.686-0.8830.40 0.019 0.032 0.002 0.001 0.35 -0.065-0.398-0.448 -0.533 -0.667-0.8340.50 0.005 0.012 -0.010 0.003 -0.060û.**40** -0.387-0.502 -0.430 -0.632 -0.6610.55 0.45 -0.375-0.407-0.472-0.559-0.5800.60 0.034 0.054 0.066 0.055 0.011 0.50 -0.343 -0.404-0.438-0.476-0.5010.65 0.117 0.55 -0.326 -0.357 -0.393 -0.427-0.4350.70 0.115 0.153 0.161 0.151 0.115 0.60 -0.317-0.328 -0.344-0.371-0.3770.75 0.153 0.178 0.195 0.192 0.151 0.65 -0.275-0.291 -0.286 -0.313-0.3290.80 0.203 0.170 0.185 0.213 0.153 3.70 -0.257-0.255 -0.251-0.257 -0.272**ଃ.85** 0.166 0.180 0.198 0.209 0.165 0.75 -0.236 -0.222-0.207 -0.225-0.2430.90 0.130 0.149 0.174 0.144 0.164 0.80 -0.191-0,166 -0.170 -0.174-0.1990.95 0.084 0.102 0.131 0.131 0.095 0.85 -0.141-0.114-0.115 -0.119 -0.1480.036 1.00 0.014 0.047 0.048 -0.0150.90 -0.098 -0.059 -0.061-0.106-0.0440.95 -0.024 -0.0080.005 0.009 -0.0691.00 0.014 0.036 0.047 0.048 -0.015

	CHORDWISE 1B 2 3 -1.25 -0.25 0.75 030006 .018	4A 4B 5A 5 4.25 3.75 7.75	5B 6 6.75 10.75 .161 .256	ROW ID X X/CR	NORMAL ROWS A B C D E F G H 12,35 17,35 24,35 31,35 36,35 41,35 42,35 44,85 0,294 0,413 0,580 0,747 0,866 0,985 1,009 1,069
X X/CR 10.35 0.247 0.02 11.35 0.270 0.08 12.35 0.294 14.35 0.342 0.06 15.35 0.366 0.05 16.35 0.390 0.05 17.35 0.413 0.04 18.35 0.437 0.03 19.35 0.461 0.04 20.35 0.485 0.02 22.35 0.533 0.02 23.35 0.556 0.03 24.35 0.580 0.04 25.35 0.604 0.04 26.35 0.628 0.05 27.35 0.652 0.07 30.35 0.723 31.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 33.35 0.795 34.35 0.818 35.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.961 41.35 0.985 42.35 1.069 44.85 1.069 45.85 1.069 45.85 1.092 46.85 1.116	7 6 5 6 6 6 6 6 6 6 6 9 4 0	04	-0.296 0.442 -0.276 -0.271 -0.272 -0.275 -0.277 -0.256 -0.258 -0.258 -0.233 -0.215 0.197-0.169 0.138-0.160 0.174-0.157 0.152-0.130 0.130-0.132 0.110-0.111 0.104-0.101 0.104-0.101 0.100-0.106 0.085-0.089 0.051-0.067 0.038-0.072 0.039-0.131 0.019-0.064	6.75 0.161 5.75 0.137 4.75 0.113	-0.264-0.179-0.115 -0.235-0.223-0.193-0.115 -0.276-0.256-0.169-0.111-0.072-0.131 -0.333-0.329-0.274-0.198-0.115-0.066 -0.371 -0.197-0.110-0.038-0.039-0.019 7-0.360-0.335-0.294-0.207-0.118-0.039-0.017-0.030 -0.204-0.118-0.047-0.021-0.003 1-0.372-0.355-0.303 -0.208-0.111-0.041-0.021-0.001 -0.213-0.122-0.017 0.006 0.006 -0.204-0.128 0.008 0.002 0.021 -0.235-0.126 0.003 0.013 0.007 -0.017 0.039 0.028 0.135 0.131 0.039 0.063 0.037 0.116 0.128 0.078 0.074 0.037 0.078 0.045 0.049 -0.110 0.117 0.073 0.075 0.041 0.078 0.047 0.039 0.111 0.108 0.059 0.073 0.042 0.115 0.088 0.071 0.068 0.052 0.071 0.047 0.078 0.071 0.075 0.059 0.053 0.077 0.070

RUN SEQ 201 2

MACH RN/L RN PT P TTR Q ALPHA CONF WING COEFFICIENTS
0.741 2.993 6.81 1623 1127 546.6 433.1 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF
0.395 0.098 0.493-0.0139-0.0147-0.0286 0.2108 28.52 40.02 30.80 42.73 0.000 0.00

		u I	NC SECTI	ON COEFF	ICIENTS							WING	S UPPER	SURFACE	COEFFICIE	ENTS
2Y/B	CNUS	CNLS	CNS CM	IUS CML	S CMS		XCPLS		CNC/	CMC/	2Y/B	0.099	0.296		0.697	0.894
0.099	0.316	0.106 0	.422-0.0	325-0.02	05-0.0530	35.26	44.37	37.55	0.605	0.145	Χ/C	0.070	0 277	0 140	0.104	∩ 170
0.2%	0.389	0.105 0	.495-0.0)232-0.02)237-0.02	57-0.0489 86-0.0524	30.96 30.30	49.3/	34.69	0.603	0.006 0.099	0 0.003	0.378	0.277	0.162 -0.302	0.104	0.178
0.500 0.697	0.447	0.109 0	.556-0.C	1237-0.02 128 4 -0.02	72-0.0556	30.84	52.15	34.49	0.461-	0.132	0.006			-0.550	-0.589	
0.894	0.489	0.643 0	.532-0.0	0.01	73-0.0636	34.48	65.27	36.97	0.305-	0.101	0.01	-0.381	-0.697	-0.836	-0.276	-0.678
	=			00555101							0.02	-0.658	-1.071	-1.195	-1.176	-0.871
	WING			COEFFICI							0.03	-0.732	-1.252	-1.370	-1.317	-0.918
2Y/B	0.099	0.2%	0.500	0.697	0.894						0.04	-0.702	-1,182	-1.391	-1.314	-0.910
X/C												-0.678	-1.214	-1,460	-1.483	-1.036
0	0.535	0.535	0.535	0.535	0.535						0.06	-0.650	-1.009	-1.391	-1.403	-0.817
0.01			0.432								0.08	-0.611	-0.901	-0.980	-1.050	-0.830
0.02			0.358								0.10	-0.573	-0.825	-0.890	-0.862	-0.801
0.03			0.313								0.125	-0.538	-0.744	-0.843	-0.835	-0.788
0.04			0.268								0.15	-0.510	-0.681	-0.777	-0.827	-0.774
0.05	0.236	0.234	0,235	0.216	0.141						0.175	-0.480	-0.630	-0.719	-0.777	-0.769
0.10	0.165	0.136	0.131	0.128	0.053						0.20	-0.471	-0.586	-0.669	-0.742	-0.779
0.15	0.129	0.100	0.094	0.071	800.0						0.225	-C.451	-0.552	-0.630	-0.704	-0.756
0.20	0.100	0.070	0.073	0.057	-0.017						0.25	-0.415	-0.510	-0.602	-0.684	-0.750
0.30	0.065	0.040	0.035	0.024	-0.074						0.30	-0.412	-0 476	-0.562	-0.674	-0.780
0.40	0.037	0.022	0.013	0.011	-0.066						0.35	-0.382	-0.432	-0.510	-0.639	-0.753
0.50	0.021	0.011	0.011	-0.002	-0.049						0.40	-0.363	-0.405	-0.480	-0.582	-0.669
0.55											0.45	-0.349	-0.385	-0.459	-0.538	-0.587
0.60	0.048	0.055	0.080	0.059	0.010						0.50	-0.325	-0.367	-0.418	-0.476	-0.494
0.65			0.124			•					0.55	-0.303	-0.331	-0.370	-0.416	-0.435
0.70	0.125	0.157	0.162	0.153	0.110						0.60	-0.277	-0.305	-0.339	-0.365	-0.378
0.75	0.156	0.179	0.189	0.193	0.140						0.65	-0.249	-0.257	-0.291	-0.312	-0.333
0.80	U.165	0.190	0.200	0.192	0.160						0.70	-0.224	-0.221	-0.255	-0.262	-0.280
0.85	0.164	0.185	0.196	0.190	0.159						0.75	-0.214	-0.197	-0.199	-0.210	-0.244
0.90	0.128	0.155	0.162	0.168	0.136						0.80	-0.176	-0.164	-0.168	-0.162	-û.195
0.95	0.081	0.106	0.121	0.125	0.092						0.85	-0.128	-0.123	-0.117	-0.112	-0.141
1.00	0.017	0.042	0.044	0.047	-0.006						0.90	-0.078	-0.068	-0.061	-0.055	-0.104
. ,	 · ·	- · · · -	- • - ·	· • -							0.95	-0.017	0.004	0.001	-0.004	-0.074
											1.00	0.017	0.042	0.044	9.047	-0.006

14 FEB 84@17.16 CONT. PAGE 66

TST-356 PH-1 TN-66 201.2

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .018	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.3	
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.485 22.35 0.533 23.35 0.556 24.35 0.580 25.35 0.604 26.35 0.628	0.007 0.092 0.073 0.066 0.062 0.054 0.040 0.036 0.051 0.065 0.065 0.065 0.061 0.150 0.153 0.150 0.150 0.150 0.149 0.131 0.121 0.131 0.121 0.080 0.098 0.098 0.098 0.102-0.026-0.02 0.080-0.003-0.00 0.067 0.038 0.069 0.078 0.049 0.033 0.049 0.033 0.049 0.033 0.049 0.033 0.049 0.033 0.049	-0.338	268 5,75 0,137

RUN SEQ 202 2

TST-356 PH-1 TN-66 202+2

MACH RN/L RN PT P TTR Q ALPHA CONF WING COEFFICIENTS
0.700 2.997 6.82 1678 1209 546.3 415.1 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF
0.382 0.101 0.483-0.0120-0.0150-0.0270 0.2060 28.13 39.83 30.59 42.64 0.000 0.00

		บโ	NG SECTI	ION COEFF	ICIENTS							WIN	G UPPER	SURFACE	COEFFICI	ENTS
2Y/B	CNUS	CNLS	CNS CN	TUS CML	S CMS		XCPLS		CNC/	CMC/	2Y/B		0.2%	0.500		0.894
0.099	0.305	0.110 0	.415-0.0	0287-0.02	23-0.0510	34.41	45.24	37.28	0.595	0.145	X/C	0 2 2	0 225	0 110	0.053	0.154
0.296	0.380	0.107 0	.487-0.0	0222-0.02	55-0.0477	30.85	48.79	34./9	0.595	0.007	0 003	0.362	0.235	0.110 -0.371	0.053	0.154
0.500	0.431	0.111 0	1.542-U.U	J210-0.02 1201-0-02	74-0.0484 75-0.0566	27.00	49.07 51 28	31.96	0.042	-0.094 -0.131	0.003 0.006			-0.632	-0.655	
0.697 0.894	0.467	0.105 0	51/4-0.0	1271-0.02 1111-0.01	87-0.0628	34 52	61 73	37 21	0.432	-0.131	0.00	-0.426	-0,773	-0.936		-0.705
0.074	0.404	0.051 0	.J!#-U.(J44: 0.0:	0.0020	54.JE	01.70	O7 .E.	0.275	0.070	0.02	-0.700	-1,139	-1.306		-0.866
	WING	LOWER	SURFACE	COEFFICI	ENTS						0.03	-0.749	-1.237	-1.427	-1.317	-0.891
2Y/B	0.099	0.2%	0.500		0.894						0.04	-0.713	-1.172	-1.333		-0.853
X/C											0.05	-0.683	-1.114	-1.395	-1.445	-0.944
0	0.531	0.531	0.531	0.531	0.531						0.06	-0.657	-0.955	-1.118	-1.026 -0.955	-0.772 -0.773
0.01			0.445								0.0 8 0.10	-0.612 -0.574	-0.878 -0.796	-0.970 -0.923	-0.900	-0.752
0.02 0.03			0.368 0.323								0.125	-0.525	-0.730	-0.815	-0.845	-0.743
0.03			0.323								0.15	-0.505	-0.675	-0.757	-0.819	-0.726
0.05	0.237	0.233	0.248	0.231	0.145						0.175	-0.475	-0.615	-0.696	~0.752	-0.723
0.10	0.159	0.149	0.146	0.145	0.059						0.20	-0.456	-0.573	-0.665		-0.725
0.15	0.122	0.104	0.104	0.090	0.013						0.225	-0.431	-0.532	-0.626		-0.713
0.20	0.098	0.073	0.080	0.059	-0.010						0.25	-0.401	-0.502	-0.601	-0.676	-0.709
0.30	0.069	0.047	0.042	0.024	-0.047						0.30	-0.395 -0.360	-0.466 -0.423	-0.540 -0.495	-0.6 4 9 -0.597	-0.731 -0.693
0.40	0.043	0.026	0.019 0.015	0.010 0.004	-0.055 -0.046						0.35 0.40	-0.345	-0.395	-0.461	-0.547	-0.630
0.50 0.55	0.030	0.014	0.015	0.004	-0.040						0.45		-0.366			-0.561
0.60	0.060	0.057	0.069	0.066	0.021						0.50	-0.308	-0.339	-0.384	-0.461	-0.490
0.65			0.113								0.55	-0.288	-0.312	-0.348		-0.429
0.70	0.131	0.151	0.154		0.117						0.60	-0.259	-0.291	-0.320		-0.367
0.75	0.156	0.178	0.189		0.151						C.65	-0.230	-0.250	-0.274	-0.304	-0.321
0.80	0.168	0.191	0.195		0.160						0.70	-0.211 -0.195	-0.217 -0.197	-0.237 -0.190		-0.26 4 -0.227
0.85	0.164	0.183	0.191	0.194	0.158 0.140						0. <i>7</i> 5 0.80	-0.1 5 3	-0.163	-0.160		-0.186
0.90 0.95	0.134 0.090	0.149	0.163 0.116		0.140						0.85	-0.120	-0.118	-0.108		-0.137
1.00	0.019	0.030	0.047	0.044	-0.009						0.90	-0.075	-0.063	-0.058		-0.096
	J.J.,		3.3.7	J. J. V							0.95	-0.011	-0.006	0.002		-0.062
											1.00	0.019	0.030	0.047	0.044	-0.009

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID Y Y/CR	1A 1B -2.75 -1.2 06603	5 -0,25 0	3 4A	48 5A 3.75 7.75 .089 .185	58 6 6,75 10,75 ,161 ,256	ROW ID X X/CR		D E 31,35 36,35	F G H 41.35 42.35 44.85 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.294 14.35 0.366 14.35 0.366 16.35 0.366 16.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.604 26.35 0.628 27.35 0.628 27.35 0.723 31.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.866 37.35 0.818 35.35 0.842 36.35 0.866 37.35 0.890 38.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.961 41.35 0.961 41.35 0.961 41.35 0.961 41.35 0.961 41.35 0.961 41.35 0.961 41.35 0.961	0.078 0.073 0.066 0.056 0.056 0.047 0.050 0.053 0.057 0.069 0.060 0.070 0.089 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0	47 -0 47 -0 39 -0 38 -0 32 -0 16 -0	.167 .159 .146 .123 .106 .086 .049 .030 .014 .010 .023 .018	-0.288 -0.275 -0.233 -0.184-0.158- -0.168 -0.164 -0.141 -0.128 -0.116 -0.098 -0.066 -0.064 -0.037 -0.018 -0.011	-0.251 -0.227 -0.243 -0.225 -0.215 -0.215 -0.200 -0.190 -0.174 -0.168-0.164 -0.152-0.139 -0.132-0.132 -0.130-0.130 -0.119-0.113	6.75 0.161 5.75 0.137 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.042 0.75 0.018 -0.25-0.006 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 -5.25-0.125	-0.211-0.19 -0.250-0.219 -0.288-0.275-0.233 -0.318-0.299-0.259 -0.357-0.310-0.27 0.056 0.069 0.091 0.063 0.054 0.096 0.072 0.066 0.078 0.076 0.076 0.073	3-0.158-0.106 -0.168-0.106 6-0.170-0.105 -0.165-0.101 1 -0.184-0.116 -0.174-0.094 -0.198-0.106 0.138 0.132 0.128 0.116 9- 0.124 0.116 0.097 0.098	2 1-0.068-0.123 5-0.038 -0.031 4-0.051-0.035-0.026 5-0.026-0.017-0.009 1-0.022-0.013 0.005 5-0.018-0.011 0.001 4-0.012 0.003 0.018 4-0.009 0.023 0.030 5 0.010 0.023 0.018 0.039 0.050 0.022 2 0.052 0.064 0.038 6 0.072 0.071 0.053 7 0.070 0.068 0.050 4 0.079 0.077 0.046 8 0.078 0.071 0.057 3 0.082 -0.043 6 0.074

RUN SEQ 203 2

MACH RN/L RN PT P TTR Q ALPHA CONF 0.599 3.037 6.91 1878 1474 544.7 369.7 5.00 17 CNU CNL CN CMU CML CM CB XCPU XCPL XCP YCP TAU CF 0.365 0.101 0.466-0.0100-0.0145-0.0245 0.1986 27.74 39.37 30.26 42.62 0.000 0.00

				ION COEFF		VODILO VO	אר כי א	vcDC	CNC (CMC /	2V /B		G UPPER 0,296		COEFFICI 0.697	ENTS 0.894
2Y/B 0.099	CNUS	CNLS	CNS C	MUS CML 0267-0.02	S CHS 01-0 0468	XCPUS XC			CNC/ 0.571		2Y/B X/C	0.099	0.270	0.500	0.077	0.074
0.296	0.367	0.106	0.473-0.	0201-0.02	40-0.0441	30,47 47	7.64 3	34.32	0.577	0.010	0	0.284	0.137	0.001	-0.039	0.109
0.500	0.412	0.113	0.525-0.	0200-0.02	68-0 0468	29.85 48	3.71 3	33.91	0.525-	0.091	0.003			-0.516	0 770	
0.697				0269-0.02 0426-0.01							0.006 0.01	-0.502	-0.904	-0.782 -1.068	-0.779 -1.060	-0.717
0.894	0.434	0.000	0.472-0.	0420-0.01	04-3.0010	34.02 30	J.00 C	37 . 44 1	0.202	0.074	0.02	-0.752	-1.205		-1.242	-0.830
	WING	LOWER	SURFACE	COEFFICI	ENTS						0.03	-0.762	-1.202		-1.213	-0.829
2Y/B	0.099	0.296	0.500	0.697	0.894						0.04	-0.717	-1.127	-1.241	-1.146	-0.801
X/C	0 522	0 E22	0 522	0 523	0.523						0.05 0.06	-0.694 -0.648	-1.039 -0.928	-1.175 -1.044	-1.171 -0.993	-0.829 -0.729
0 0.01	0.523	0.523	0.523 0.454		0.525						0.08	-0.593	-0.854	-0.935		-0.720
0.02			0.384								0.10	-0.549	-0.784	-0.874	-0.862	-0.697
0.03			0.328								0.125	-0.525	-0.708	-0.776	-0.795	-0.673
0.04	0 220	0.239	0.291 0.249		0.160						0.15 0.1 <i>7</i> 5	-0.497 -0.472	-0.642 -0.585	-0.714 -0.664	-0.775 -0.720	-0.675 -0.663
0.05 0.10	0.230 0.161	0.239		_	0.081						0.20	-0.432	-0.544	-0.636		-0.664
0.15	0.123	0.104			0.033						0,225	-0.408	-0.514	-0.593	-0.648	-0.658
0.20	0.093	0.077	0.087		0.010						0.25	-0.377	-0.482		-0.626	-0.655
0.30	0.066 0.041	0.043 0.036			-0.034 -0.043						0.30 0.35	-0.362 -0.331	-0.445 -0.399		-0.605 -0.560	-0.667 -0.627
0. 4 0 0.50	0.031	0.014	0.009		-0.038						0.40	-0.318	-0.370			-0.580
0.55	••••										0.45	-0.305	-0.347	-0.405		-0.526
0.60	0.057	0.063			0.026						0.50	-0.285	-0.323 -0.295		-0.428 -0.385	-0. 4 63 -0. 4 07
0.65 0.70	0.121	0.143	0.120 0.157		0.117						0.55 0.60	-0.267 -0.244	-0.271	-0.288		-0.352
0.75	0.145	0.170			0.147						0.65	-0.221	-0.239			-0.317
0.80	0.154	0.180	0.189	0.196	0.152						0.70	-0.205	-0.208			-0.255
0.85	0.147	0.176			0.156						0.75 0.80	-0.186 -0.152	-0.185 -0.157			-0.217 -0.186
0.90 0.95	0.129 0.081	0.147 0.093			0.138 0.096						0.85	-0.119	-0.113			-0.136
1.00	0.009	0.026			-0.005						0.90	-0.073	-0.067			-0.096
											0.95	-0.021	-0.003			-0.057
						-					1.00	0.009	0.026	0.036	0.035	-0.005

NATIONAL AERONAUTICE AND SPACE ADMINISTRATION AMES RESEARCH CENTER: MOFFETT FIELD, CALIF. PRELIMINARY DATA

ID-PRESSOUT6

RUN SEQ 204.2

WING COEFFICIENTS MACH RN/L RN PT P TTR Q ALPHA CONF CB XCPU XCPL XCP YCP TAU CF 0.501 3.023 6.88 2133 1798 543.9 315.2 5.00 17 CNU CNL CN CMU CML CM 0.350 0.106 0.456-0.0074-0.0150-0.0225 0.1940 27.12 39.20 29.93 42.55 0.000 0.00

2Y/B 0.099	CNUS	CNLS	CNS CM	ION COEFF			XCPLS		CNC/	CMC/ 0 143	2Y/B X/C		0.296		0.697	ENTS 0.894
0.296 0.500	0.348	0.113 0). 461- 0.0).512-0.0)153-0.02)177-0.02	50-0.0403 58-0.0446	29,41 29,49	47.11 47.78	33.76 33.70	0.562 0.512	0.013 -0.088	0 0.003	0.286	0.064	-0.593	-0.112	0.073
0.697 0.894	0.428	0.1110).539-0.0).482-0.0)259-0.025 N/18-0.015	58-0.0517 32-0.0601	31.06	48.25 54.56	34,6U 37 A7	0.424	-0.122 -0.092	0.006 0.01	-0.514	-0.972	-0.860 -1.124	-0.841 -1.089	-0.725
0.074	0.420	0.002	,,402 U.C	J410 0.01	JE 0.0001	34. 7 0	54.50	07,47	0.2	0.072	0.02	-0.747	-1.193	-1,299	-1.210	-0.819
	WING	LOWER	SURFACE	COEFFICI	ENTS						0.03	-0.768	-1.170		-1,168	-0.811
2Y/B	0.099	0.296	0.500	0.697	0.894						0.04	-0.728	-1.082	-1.193	-1.093	-0.789
X/C											0.05	-0.694	-0.997	-1.120	-1.080	-0.768
0	0.516	0.516	0.516	0.516	0.516						0.06	-0.6 49	-0.907	-1.003	-0.971	-0.708 -0.693
0.01			0.462								0.08 0.10	-0.593 -0.553	-0.825 -0.755	-0.895 -0.829	-0.885 -0.829	-0.670
0.02			0.397								0.10	-0.510	-0.684	-0.760	-0.027	-0.656
0.03 0.0 4			0.336 0.300								0.15	-0.490	-0.617	-0.702	-0.745	-0.657
0.05	0.224	0.252	0.300	0.251	0.167						0.175	-0.449	-0.565	-0.641	-0.686	-0.645
0.10	0.161	0.156	0.164	0.149	0.087						0.20	-0.420	-0.528	-0.602	-0.660	-0.639
0.15	0.119	0.103	0.116	0.103	0.043						0.225	-0.393	-0.495	-0.560	-0.634	-0.625
0.20	0.095	0.089	0.098	0.081	0.015						0.25	-0.367	-0.470	-0.53 9	-0.608	-0.616
0.30	0.062	0.055	0.056	0.052	-0.028						C.30	-0.361	-0.420		-0.571	-0.633
0.40	0.052	0.047	0.035	0.029	-0.034						0.35	-0.329	-0.381	-0.449	-0.528	-0.605
0.50	0.043	0.028	0.019	0.022	-0.023						0.40	-0.311	-0.344	-0.413	-0.494	-0.562
0.55											0.45	-0.291	-0.325		-0.449	-0.504
0.60	0.072	0.070	0.087	0.061	0.029						0.50	-0.267	-0.302		-0.415	-0.446
0.65			0.128	0.450							0.55	-0.249	-0.278		-0.367	-0.388
0.70	0.126	0.138	0.154	0.153	0.118						0.60	-0.232	-0.245	-0.277	-0.328	-0.345
0.75	0.150	0.171	0.179	0.179	0.140						0.65	-0.215	-0.212		-0.274	-0.316
0.80	0.149	0.182	0.175	0.196	0.151						0.70	-0.187	-0.178		-0.239	-0.261
0.85	0.153	0.180	0.184	0.182	0.146						0.75	-0.164	-0.163		-0.197 -0.168	-0.213 -0.179
0.90	0.132	0.143	0.153	0.153	0.135						0.80 0.85	-0.130 -0.103	-0.137 -0.104	-0.101	-0.110	-0.127
0.95	0.096	0.097	0.121	0.108	0.098						0.85	-0.103 -0.061	-0.048		-0.057	-0.127
1.00	0.023	0.041	0.037	0.022	-0.016						0.95	-0.015	0.003		-0.002	-0.061
											1.00	0.023	0.041	0.037	0.022	-0.016
												V. V25	0.041	0.007	J. UEE	0.0.0

ROW ID Y Y/CR	CHCRDWISE 1A 1B 2 3 -2.75 -1.25 -0.25 0.75 066030006 .018	4A 4B 5A 5B 6 5 4.25 3.75 7.75 6.75 10.75	NORMAL ROWS ROW ID A B C D E F G H X 12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85 X/CR 0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.795 34.35 0.818 35.35 0.842 36.35 0.842 36.35 0.842 36.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 40.35 0.961 41.35 0.985 42.35 1.009 44.85 1.069 45.85 1.092 46.85 1.116	0.073 0.066 0.076 0.075 0.044 0.068 0.044 0.051 0.070 0.083 0.057 0.096 0.084 0.125 -0.13 0.125 -0.13 0.125 -0.03 0.125 -0.03 0.125 -0.03 0.107 -0.03 0.107 -0.03 0.105-0.020-0.03 0.065-0.001-0.03 0.0681 0.041 0.03 0.058 0.067 0.03 0.049 0.046 0.03 0.055 0.024 0.04	-0.125 -0.140-0.133 -0.150 -0.108-0.114 31 -0.101 -0.122-0.099 86 -0.102 -0.107-0.118 92 -0.096 -0.081-0.077 70 -0.066 -0.068-0.083 -0.041 -0.085-0.084 10 -0.056 -0.047-0.054 14 -0.021 -0.054-0.055 34 -0.020 -0.045-0.064 -0.008 -0.023-0.076 31 0.018 -0.008-0.050	Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 -0.252-0.247-0.207-0.132-0.081-0.059 -0.213-0.130-0.132-0.081-0.059 -0.223-0.081-0.059 -0.223-0.081-0.059 -0.223-0.081-0.045-0.023-0.008 5.75 0.137 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.018 -0.318-0.281-0.233 -0.146-0.096-0.020-0.008 0.018 2.75 0.066 1.75 0.018 -0.25-0.006 -1.25-0.009 -1.25-0.006 -1.25-0.006 -1.25-0.006 -1.25-0.0081 -0.075 0.083 -0.141 0.067 0.029 -0.081 0.069 0.053 0.052 0.108 0.120 0.061 0.066 0.059 -0.069 0.053 0.052 0.108 0.120 0.081 0.089 0.067 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.125 -0.25-0.054 -0.27-0.006 -0.27-0.006 -0.27-0.006 -0.27-0.006 -0.075 0.083 -0.141 0.067 0.029 -0.081 0.069 0.057 0.072 -0.028 -0.085 0.072 0.074 0.081 0.086 -0.029 -0.081 0.069 0.087 0.073 -0.0077 0.068 0.079

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Q ALPHA CONF

TTR

WING COEFFICIENTS

-0.300

-0.247

-0.085 -0.070 -0.053

-0.032 -0.004 0.017

-0.217 -0.223

-0.299

-0.274

-0.241

0.65

0.70

0.75

0.85

0.95

1.00

-0.311

-0.271

-0.206 -0.187 -0.185 -0.169 -0.209

-0.153 -0.128 -0.121 -0.116 -0.168

0.011 0.043 0.059 0.044 -0.003

-0.319 -0.326

-0.216 -0.247

-0.057 -0.124

0.000 -0.064

-0.278

-0.266

RUN SEQ

205.2

0.75

0.80

0.85

0.95

1.00

0.150

0.163

0.151

0.080

0.011

0.90 0.128

0.168

0.190

0.191

0.158

0,108

0.043

0.195

0.208

0.197

0.157

0.112

0.059

TST-356 PH-1 TN-66 205.2

MACH RN/L 821 544.8 386.6 5.00 17 CNU CNL XCPU XCPL XCP CN CMU CM CB 0.820 2.494 5.67 1277 0.435 0.084 0.519-0.0191-0.0133-0.0324 0.2220 29.39 40.80 31.25 42.74 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.296 0.500 0.697 0.894 2Y/B 0.099 CMS XCPUS XCPLS XCPS CNC/ CMC/ CNUS CNLS CNS CMUS CMLS 2Y/B 0.348 0.098 0.447-0.0431-0.0193-0.0624 37.37 44.63 38.97 0.640 0.141 X/C 0.099 0.2680.220 0.239 0.422 0.3640.426 0.093 0.519-0.0298-0.0243-0.0541 32.00 50.96 35.42 0.633 0.002 0 0.296 0.488 0.091 0.579-0.0263-0.0271-0.0534 30.39 54.84 34.23 0.579-0.102 0.003 -0.1440.500 0.543 0.083 0.626-0.0293-0.0268-0.0561 30.40 57.41 33.96 0.493-0.139 0.006-0.362-0.3920.697 0.538 0.019 0.556-0.0459-0.0155-0.0614 33.54 108.4 36.03 0.319-0.104 -0.618-0.281 -0.505 -0.644-0.559 0.01 0.894 -0.866-0.947-0.9240.02 -0.782 **-0.57**シ -1.056 -1.067 -0.865 -1.109-0.668 0.03 WINC LOWER SURFACE COEFFICIENTS -0.844 0.04 -0.653 -1.107 -1.163-1.097 0.697 0.894 0.2% 0.500 2Y/B 0.099 -1.145-1.249 -1,230 -0.638 -0.988 0.05X/C -1.259 -1.217 -0.995 0.06-0.622-1.123 0.543 0.543 0.543 0.543 0 0.543 -1.081-0.597-1.241-1.2040.08 -0.994 0.01 0.3990.10 -0.570 -0.862 -1,250 -1.216-1_000 0.323 0.02 -0.8260.125 -0.530-1.230 -1,228 0.276 -1,002 0.03 -0.7700.15 -1.069-1.246-0.511-0.991 0.234 0.04-0.7110.175 -1.218 -0.508 -0.7770.05 -0.995 0.202 0.182 0.112 0.225 0.222 0.20 -0.505-0.650 -0.720-1.207 -1.0040.105 0.10 0.124 0.089 0.151 0.005 0.225 -0.673-0.939-0.915 -0.493-0.6050.15 0.079 0.036 -0.0440.0650.115 0.25 -0.565-0.655 -0.706-0.465-0.8640.20 0.055 0.045 0.017 -0.0660.088 -0.6210.30 -0.535-0.809-0.459-0.6900.30 0.058 0.019 0.009 -0.008-0.1120.35 -0.504-0.571-0.665-0.440-0.773-0.022 -0.1050.40 0.001 -0.0130.030 -0.434-0.488-0.526-0.643-0.7520.40 -0.020-0.0850.50 0.007 -0.012-0.014-0.403-0.454-0.502-0.583 -0.6830.45 0.55 0.50 -0.395-0.405-0.464-0.533-0.472 0.055 0.042 0.055 0.60 0.040 -0.0110.55 **-0**.379 -0.371-0.415-0.455-0.425 0.65 0.104 -0.345 -0.362 -0.378 0.60 -0.335 -0.3700.70 0.152 0.097 0.144 0.145 0.124

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AMES RESEARCH CENTER, MOFFETT FIELD, CALIF, PRELIMINARY DATA

0.176

0.194

0.197

0.165

0.123 0.078

0.044 - 0.003

0.136

0.167

0.167

0.139

14 FEB 84@17.16 CONT. PAGE 74

ID-PRESSOUTO

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

	CHORDWISE	ROWS			NORMAL ROWS
ROW ID	1A 1B 2 3	-	5B 6	ROW ID	A B C D E F G H
Y	-2.75 -1.25 -0.25 0.7		.75 10.75	X	12.35 17.35 24.35 31.35 36.35 41.35 42.35 44.85
Y/CR	066030006 .01	8 .101 .089 .185 .1	161 .256	X/CR	0.294 0.413 0.580 0.747 0.866 0.985 1.009 1.069
V V/CD				Y Y/CR	
X X/CR 10.35 0.247		-0.380		16,75 0,399	-0.342-0.216-0.152
11.35 0.270		-0.395		13,75 0,328	-0.252-0.266-0.221-0.143
12.35 0.294		-0.397 -0.362		10.75 0.256	
14.35 0.342		-0.396		•	-0.362-0.353-0.312-0.234-0.151-0.083 -0.044
15.35 0.366	0.070	-0.405	-0.324	6.75 0.161	-0.243-0.145-0.056-0.037-0.042
16.35 0.390		-0.411	1.304		-0.396-0.375-0.319-0.244-0.143-0.062-0.051-0.021 -0.241-0.131-0.059-0.038-0.018
17.35 0.413		-0.384 -0.353	-0.319 -0.326	4.75 0.113	-0.397-0.384-0.344
18.35 0.437 19.35 0.461	0.041 0.048	-0.386 -0.356	-0.326 -0.321	3.75 0.089	-0.337-0.334-0.344
20.35 0.485	- · -	-0.363	-0.320	2.75 0.066	-0.235-0.127-0.020-0.007-0.009
22.35 0.533	_ · ·	-0.332	-0.326	1.75 0.042	
23.35 0.556	, - •	-0.372	-0.297	0.75 0.018	
24.35 0.530	0.041	-0.344 -0.312	-0.299	-0.25-0.006	0.014 0.032 0.016
25.35 0.604		-0.313	-0.281	-1.25-0.030	
26.35 0.628		-0.301	-0.255	-2.25-0.054	0.125 0.127 0.079 0.076 0.032
27.35 0.652		-0.306	-0,218	-2.75-0.066 -3.25-0.077	0.055 0.041 0.109 0.122 0.074 0.064 0.039
30.35 0.723 31.35 0.747	0.140 -0.2	-0.234-0.234-0.		-4.25-0.101	0.094 0.055 0.038 0.093 0.104 0.065 0.069 0.041
32.35 0.771			.233-0.203	-5.25-0.125	0.084 0.090 0.067 0.059 0.034
33.35 0.795			.207-0.180		0.105 0.057 0.044 0.109 0.084 0.063 -0.085
34.35 0.818	_		.188-0.174		0.061 0.046 0.085 0.082 0.076
35.35 0.942	1.38 –0.1		.171-0.149		
36.35 0.866		- ·		-15.25-0.363	0.051 0.077 0.057
37.35 0.890		- -	.118-0.143		
38.35 0.914		· · · · · · · · · · · · · · · · · · ·	.103-0.119 .082-0.110		
39.35 0.938 40.35 0.961			.068-0.101		
41.35 0.985			.056-0.098		
42.35 1.009			.037-0.147		
44.85 1.069)22 -0.008 -0.	.042-0.085		
45.85 1.092					
46.85 1.116	0.049 0.018 0.0	127			
	********* ****************************	NO COACE ADMINISTRATION			

TST-356 PH-1 TN-66 206.2

RUN-SEQ 206.2

WING COEFFICIENTS Q ALPHA CONF MACH RN/L TTR XCPU XCPL XCP CB TAU 3,44 1947 1865 537,8 80,9 5,00 17 CNU CNL CMU CML CN CM 0.249 1.511 0.293 0.132 0.425 0.0015-0.0202-0.0187 0.1805 24.48 40.37 29.40 42.49 0.000 0.00 WING UPPER SURFACE COEFFICIENTS WING SECTION COEFFICIENTS 0.697 0.894 0.500 XCPUS XCPLS XCPS CNC/ CMC/ 0.099 0.296 2Y/B CMUS CMLS CMS CNUS CNLS CNS 2Y/B 0.235 0.128 0.364-0.0112-0.0289-0.0401 29.77 47.50 36.03 0.521 0.136 X/C 0.099 -0.0050.276 -0.204-0.1700.053 0.292 0.142 0.434-0.0037-0.0314-0.0351 26.28 47.13 33.09 0.530 0.017 0 0.296 0.003 -0.6400.336 0.148 0.484-0.0081-0.0331-0.0412 27.41 47.37 33.52 0.484-0.082 0.500 -0.880 0.357 0.136 0.493-0.0134-0.0303-0.0437 28.75 47.27 33.87 0.388-0.110 -0.850 0.0060.697 -0.505 -0.963 -1.077 0.349 0.098 0.447-0.0291-0.0243-0.0534 33.32 49.89 36.94 0.257-0.085 1.059 -0.6750.01 0.894 -1.205-1.093-0.7300.02 -0.733 -1.150-1.167 -1.051 0.03 -0.733-0.769 -1.073 WING LOWER SURFACE COEFFICIENTS -0.736-0.987 -0.964-0.699-1.1010.04 0,2% 0.500 0.697 0.894 2Y/B 0.099 -0.919-1.026-0.999-0.7610.05 -0.661X/C -0.598-0.861-0.900 -0.891-0.6410.060.504 0.504 0.504 0 0.504 0.504 -0.599-0.521-0.786-0.808-0.7580.08 0.01 0.489 -0.505 -0.713-0.743-0.5540.10 -0.7160.02 0.444 -0.479-0.598 -0.698 -0.659 -0.5520.125 0.375 0.33 -0.4590.15 -0.539-0.641-0.618-0.596 0.289 0.04 -0.3950.175 -0.471-0.559 -0.592 -0.5840.245 0.256 0.05 0.224 (282 0.240 -0.360-0.512 -0.599-0.535Ü.170 0.20 -0.4620.197 0.10 0.151 0.144 0.196 -0.440-0.316 -0.465 -0.573-0.5180.225 0.15 0.154 0.121 0.137 0.114 0.165 0.25 -0.307-0.434-0.458 -0.501-0.4990.20 0.127 0.069 0.090 0.133 0.160 0.30 -0.314-0.447 -0.476-0.353 0.099 -0.527 0.30 0.118 -0.0030.051 0.098 0.35 -0.298-0.303-0.413-0.422-0.5290.40 0.075 -0.0160.080 0.099 0.062 -0.265-0.336 -0.396-0.246-0.4990.40 0.50 0.046 0.033 0.073 0.067 0.028 -0.300 -0.412 -0.218 -0.2630.45 -0.407 0.55 -0.251 -0.370 0.50 -0.187-0.256-0.358 0.60 0.081 0.126 0.0640.075 0.118 -0.246 -0.2810.178 0.55 -0.193-0.302-0.2470.65 0.60 -0.192 -0.180 -0.244-0.247-0.275 0.70 0.171 0.151 0.132 0.176 0.186 -0.183 -0.153-0.220 -0.2790.75 0.65 -0.1910.150 0.194 0.171 0.210 0.170 -0.1290.70 -0.107-0.150 -0.180 -0.228 0.80 0.138 0.210 0.130 0.171 0.230 0.75 -0.098 -0.103-0.111 -0.1700.85 0.180 0.222 0.204 -0.1470.216 0.142 0.80 -0.059 -0.101-0.071 -0.144-0.1140.171 0.183 0.147 0.172 0.155 0.90 0.85 -0.053 -0.090 -0.050 -0.041 -0.057 0.103 0.131 0.108 0.167 0.95 0.136 -0.034 -0.006 -0.047 -0.007 -0.040 0.90 1.00 0.061 0.095 0.075 0.023 -0.010 -0.011 0.046 -0.065 0.055 -0.044 0.95

0.095 0.075 0.023 -0.010

0.061

1.00

ID-PRESSOUT6

WALL TURNTABLE STATIC PRESSURE COEFFICIENTS

ROW ID	CHORD 1A 1B 2 -2.75 -1.25 -0.25 066030006	0WISE ROWS 3 4A 4B 0.75 4.25 3.75 .018 .101 .089	5A 5B 6 7.75 6.75 10.75 .185 .161 .256	ROW ID X X/CR	NORMAL A B C 12.35 17.35 24.35 0.294 0.413 0.580	D E 31,35 36,35 4	F G H 41,35 42,35 44,85
X X/CR 10.35 0.247 11.35 0.270 12.35 0.294 14.35 0.342 15.35 0.366 16.35 0.390 17.35 0.413 18.35 0.437 19.35 0.461 20.35 0.533 23.35 0.556 24.35 0.580 25.35 0.628 27.35 0.628 27.35 0.628 27.35 0.628 27.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 32.35 0.747 33.35 0.747 32.35 0.795 34.35 0.866 37.35 0.866 37.35 0.866 37.35 0.914 39.35 0.938 40.35 0.938 40.35 0.938 40.35 0.938 41.35 0.938 41.35 0.985 42.35 1.069 44.85 1.069 45.85 1.092 46.85 1.116	0.093 0.044 0.078 0.085 0.126 0.177 0.023 0.111 0.065 0.076 0.126 0.192 0.029 0.131 0.098 0.143 0.193 0.257 0.094 0.195 0.130 0.121 0.155 0.207 0.007 0.036 0.029 0.116 0.101 0.083 0.166 0.070 0.004	-0.328 -0.234 -0.268 -0.197 -0.143 -0.279 -0.191 -0.231 -0.214 -0.152 -0.094 -0.230 -0.128 -0.167 -0.156 -0.155 -0.053 0.002 0.004 -0.150 -0.135 -0.042 -0.057 -0.053 0.004 0.065 -0.037 0.034 0.069 0.036 0.079 0.036 0.073 0.0073	-0.167 -0.120 -5.545 -0.247 -0.163 -0.117 -0.061 -0.210 -0.107 -0.152 -0.156 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.035 -0.042 -0.042 -0.042 -0.042 -0.042 -0.042 -0.049 -0.020 -0.049 -0.021 -0.062 -0.006 -0.023	Y Y/CR 16.75 0.399 13.75 0.328 10.75 0.256 7.75 0.185 6.75 0.161 5.75 0.137 4.75 0.113 4.25 0.101 3.75 0.089 2.75 0.066 1.75 0.018 -0.25-0.066 -1.25-0.030 -2.25-0.054 -2.75-0.066 -3.25-0.077 -4.25-0.101 -5.25-0.125 -6.25-0.149 -9.25-0.220	-0.052 -0.113-0.074 -0.163-0.141 -0.167-0.247-0.156 -0.244-0.120-0.182 -0.268-0.279-0.230 0.177 0.192 0.042 0.070 0.023 0.131 0.076 0.184 0.087	2-0.176-0.018 0.013-0.120 -0.100-0.020-0.059 0.036-0.009-0.016-0.016-0.014 -0.100-0.014 -0.115-0.055 -0.066-0.053 -0.083-0.074 -0.178-0.012 -0.115-0.057 0.143 0.130 0.172 0.134 0.115 0.170 0.128 0.216 0.163 0.055	-0.093-0.027 -0.076

TST-356 PH-1 TN-66 206+2

ID-PRESSOUT6

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LINE COUNT =

3425

END BSN 0856	WTTFAR**	06,23,25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUTE
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PREJUT6
END BSN 0856	WTTFAR**	06·23·25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+ 2 5 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06 • 23 • 25 02/17/ 84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSMAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356, P1, T66, TRAN, T171644, PRPOUT6
END BSN 0856	WTTFAR**	06+23+25 02/17/84	COMPLETE ON TAPE.	LINES=0003458, DSNAME=S356.P1.T66.TRAN.T171644.PRPOUT6

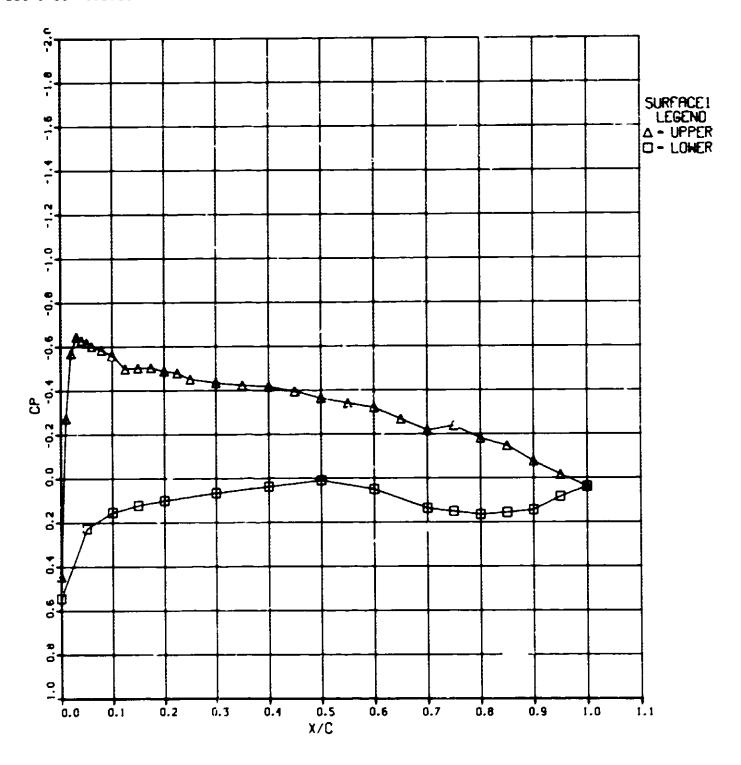
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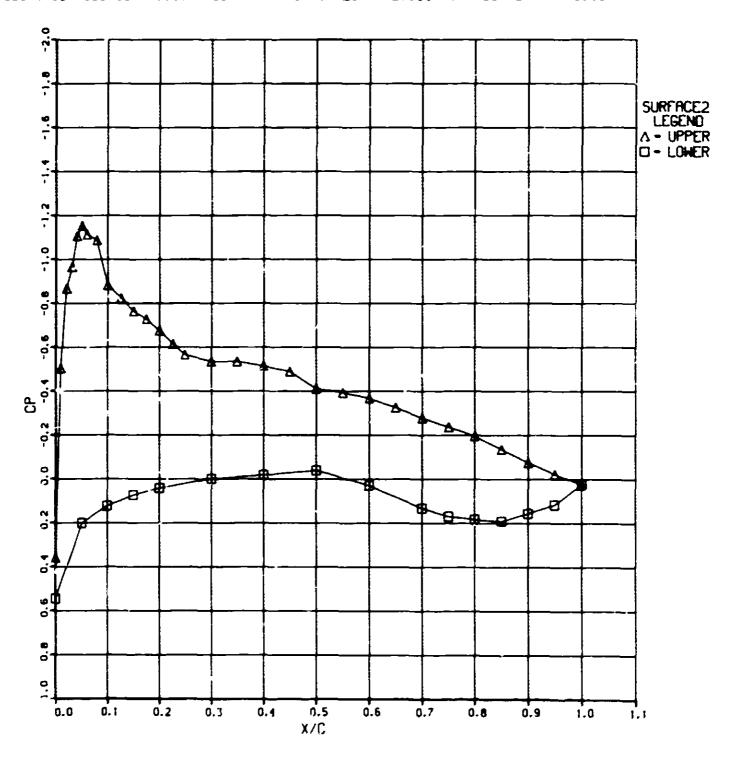
NASA AMES RESEARCH CENTER

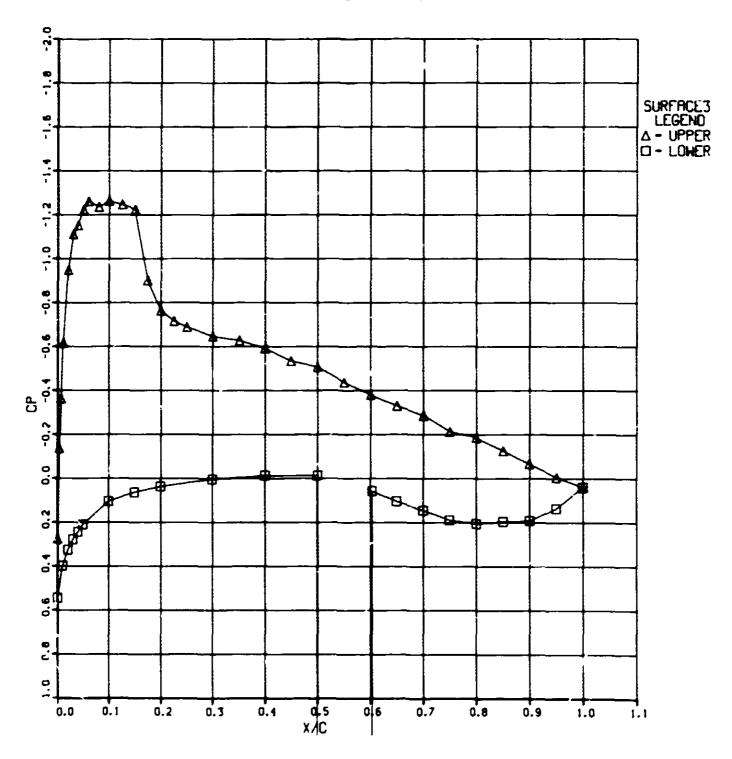
FRICK

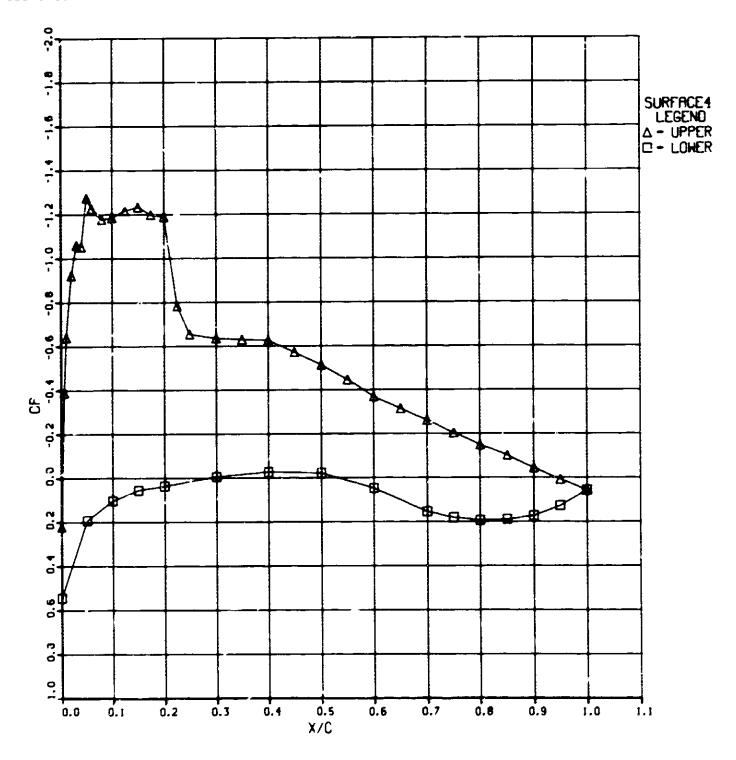
STOP 10

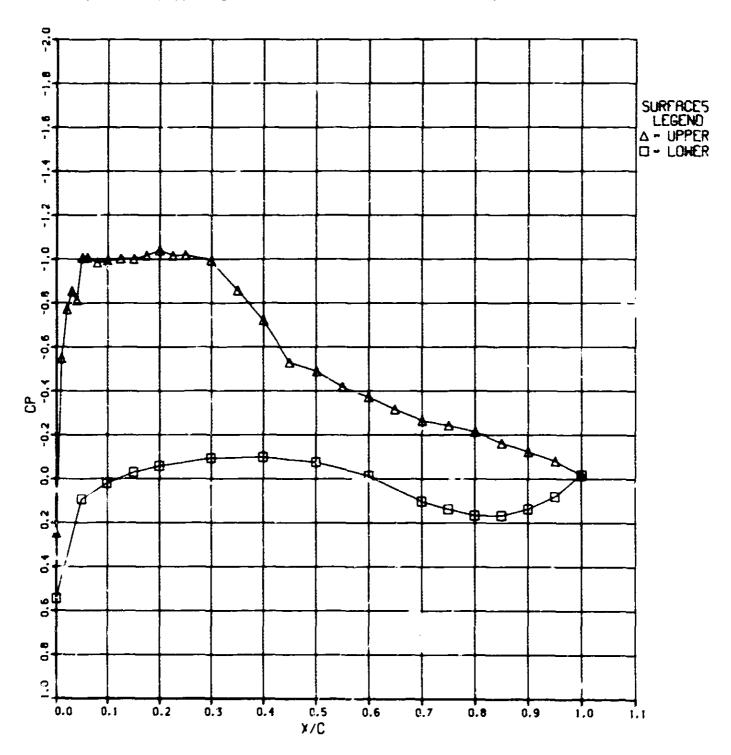
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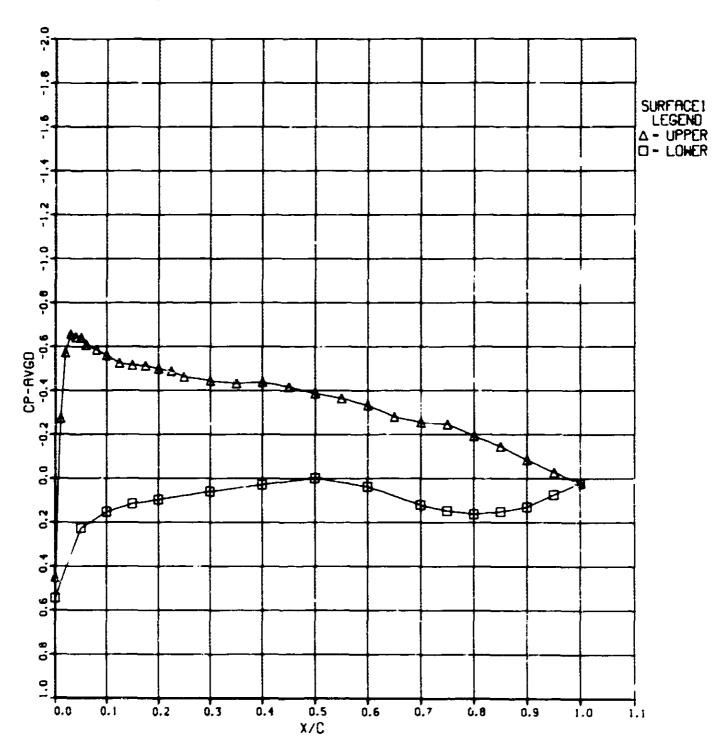


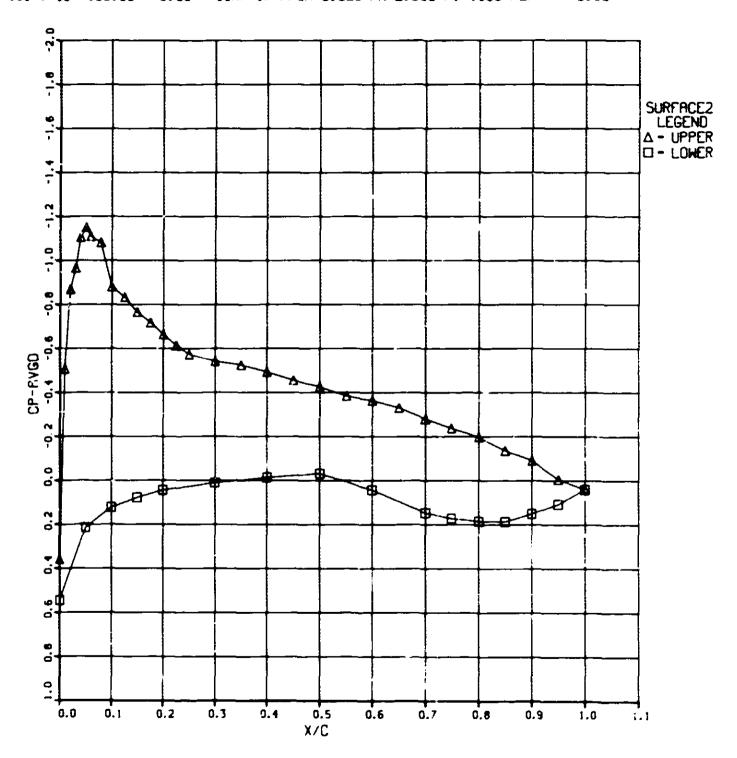


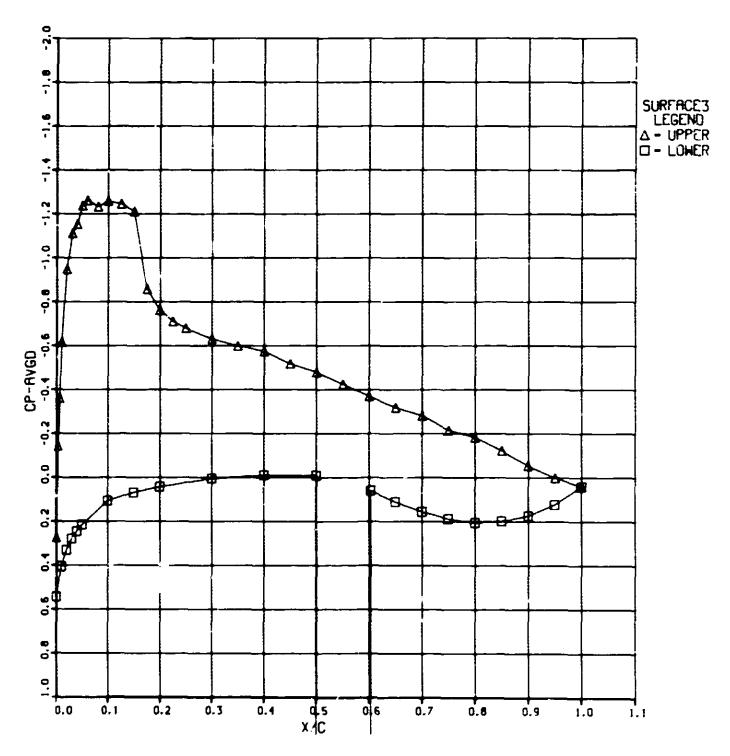


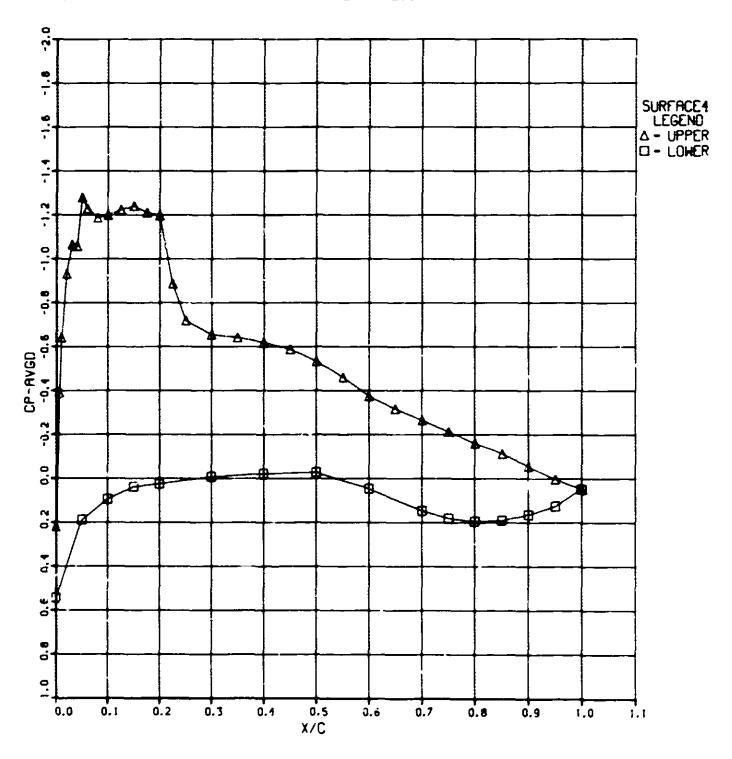


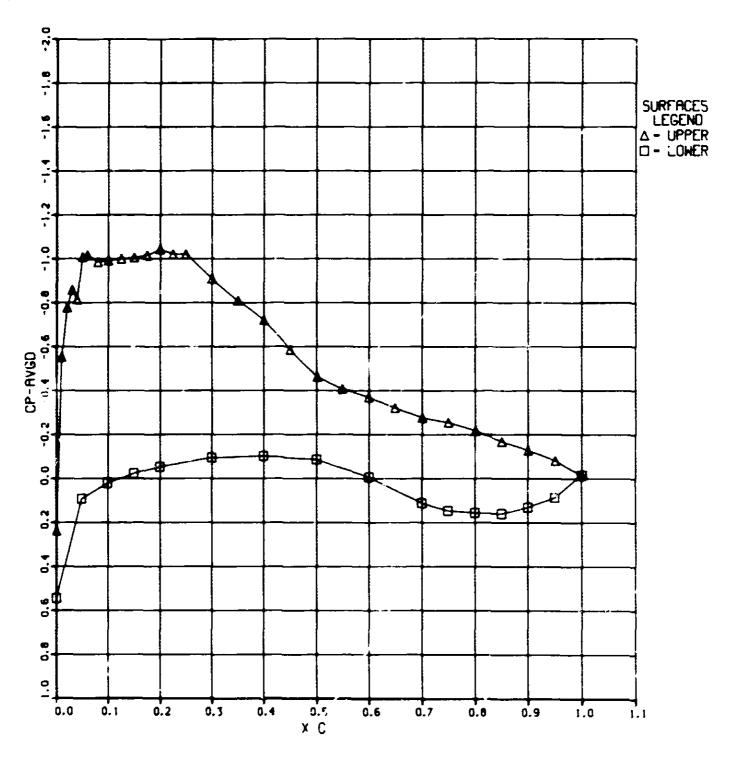


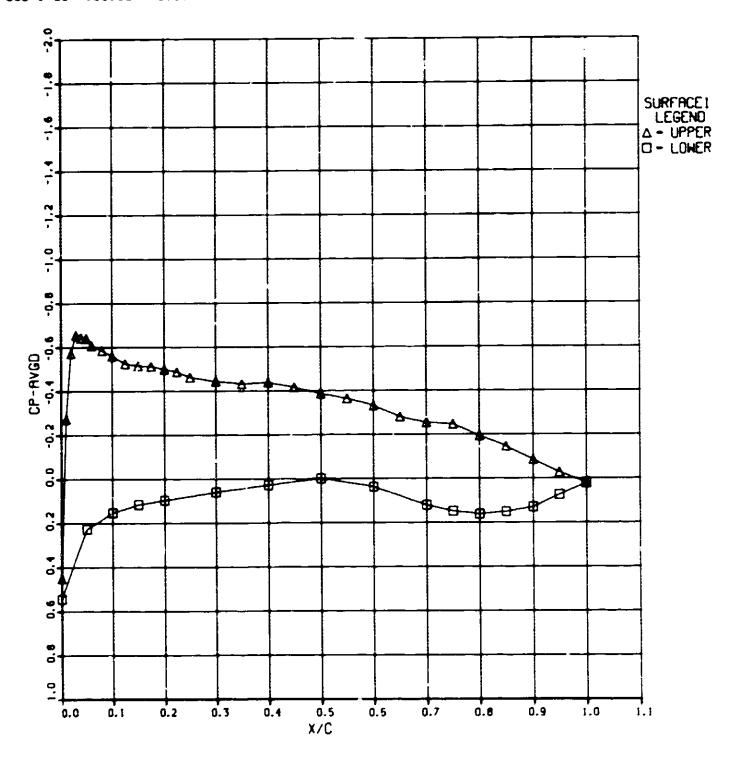


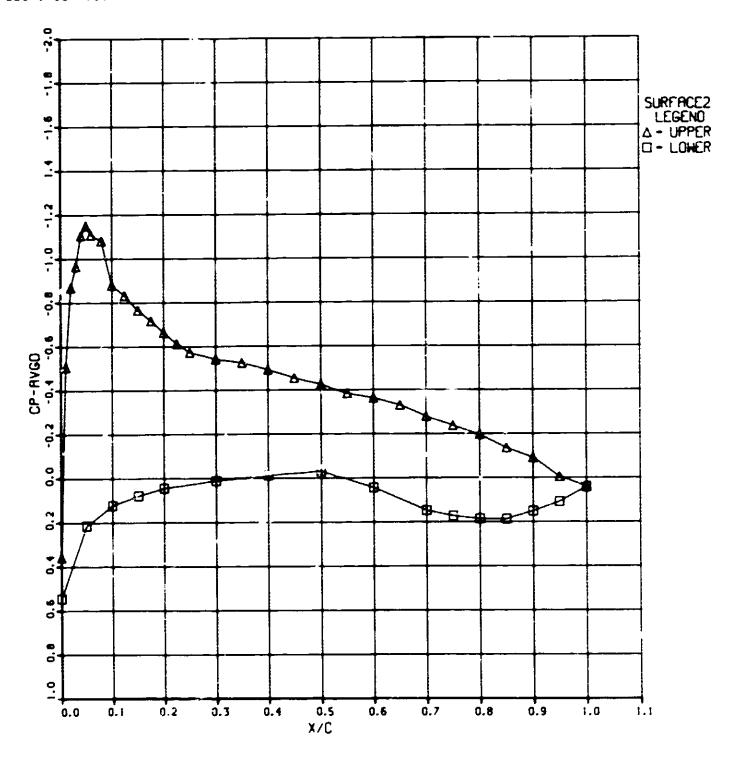


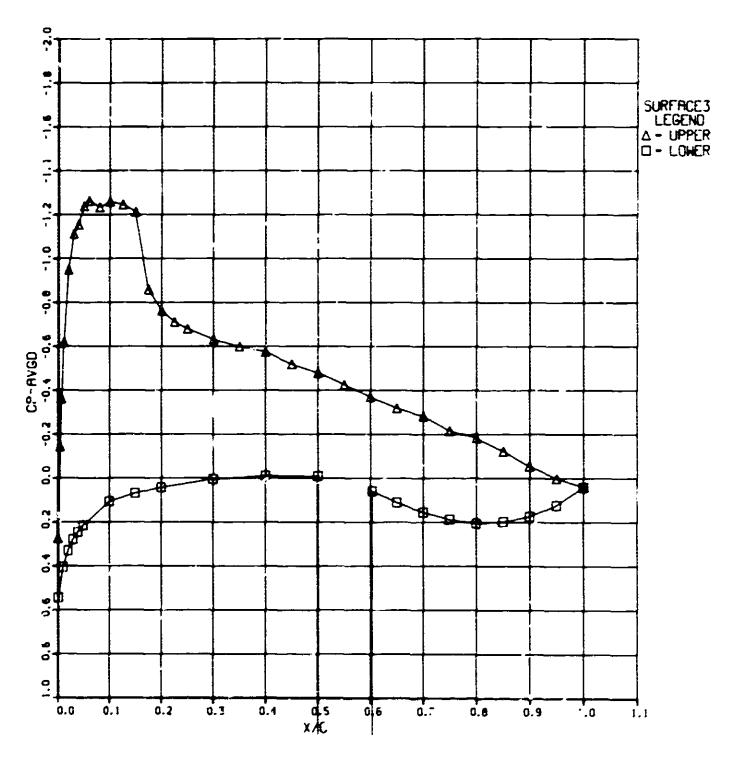


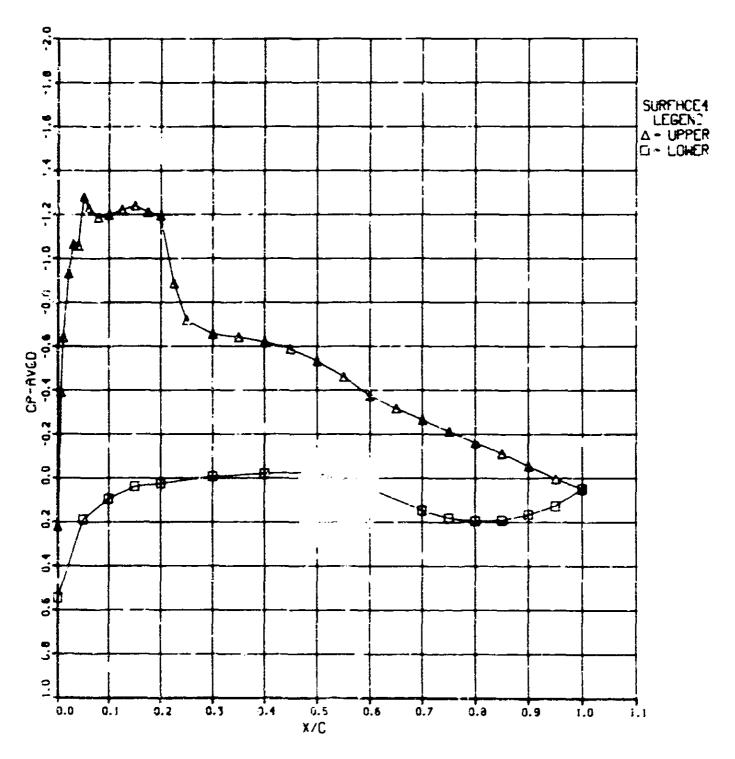


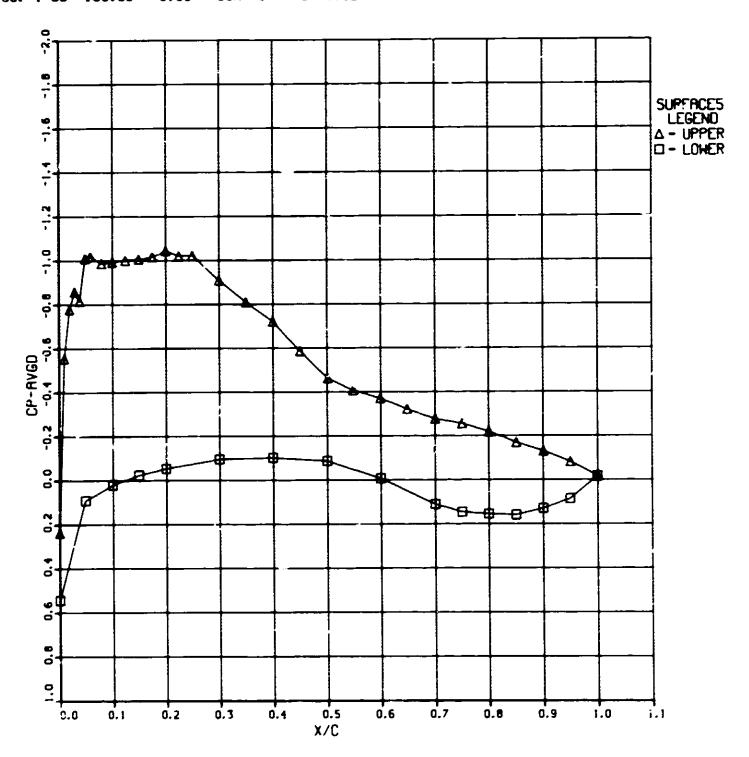


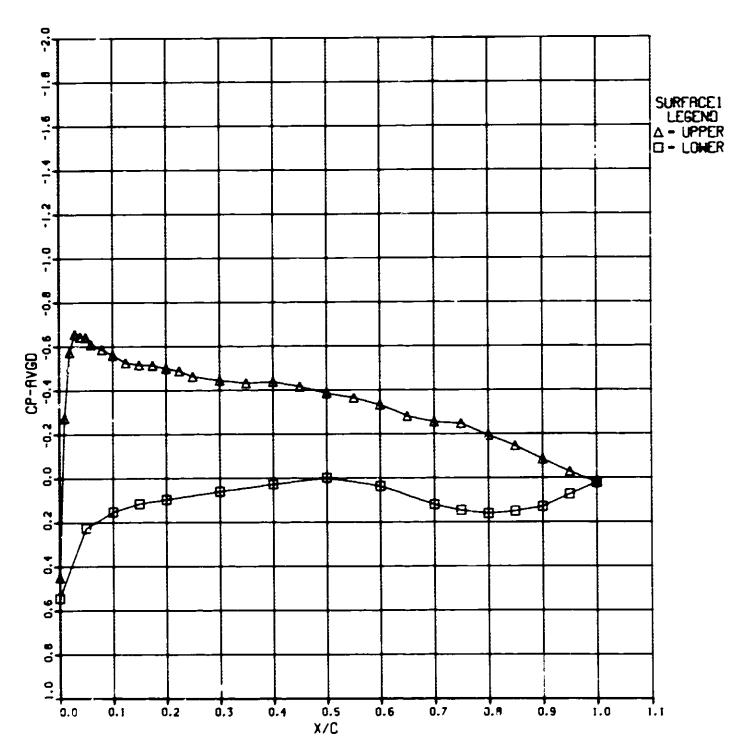


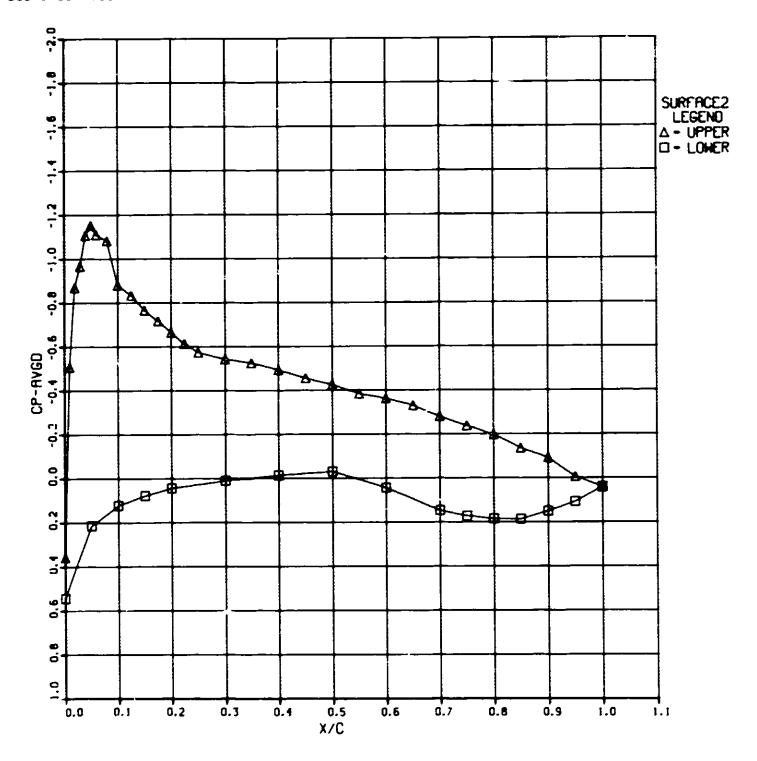


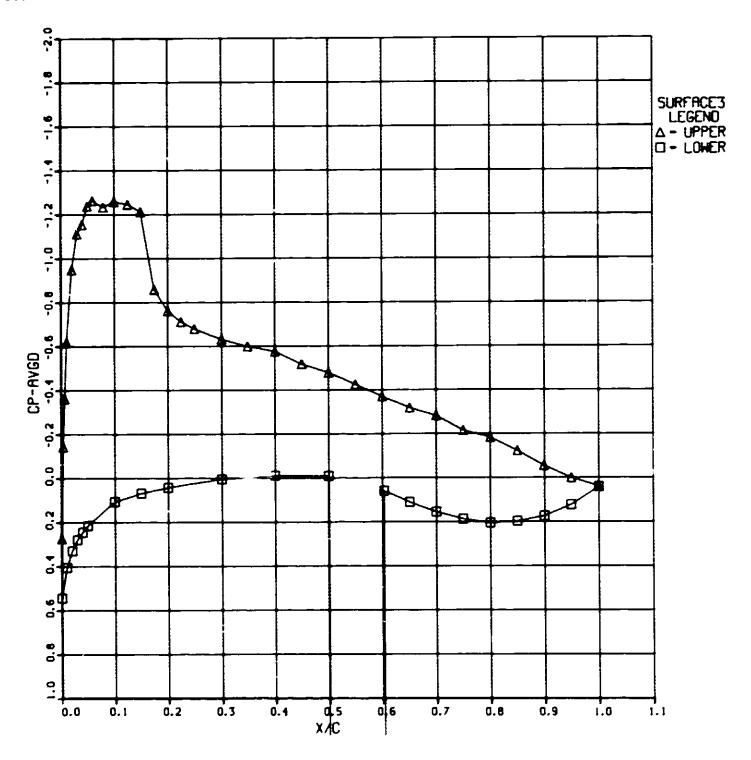


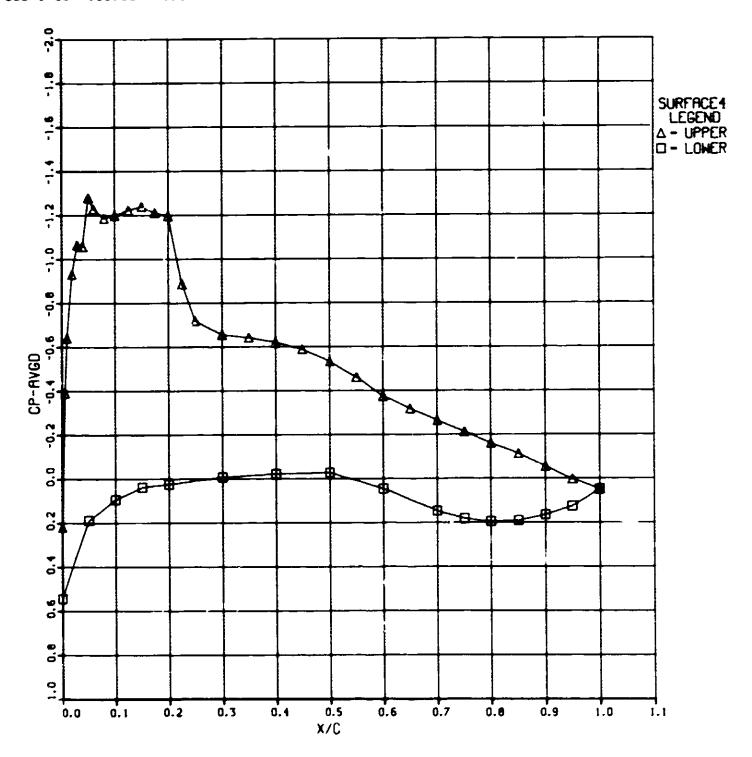


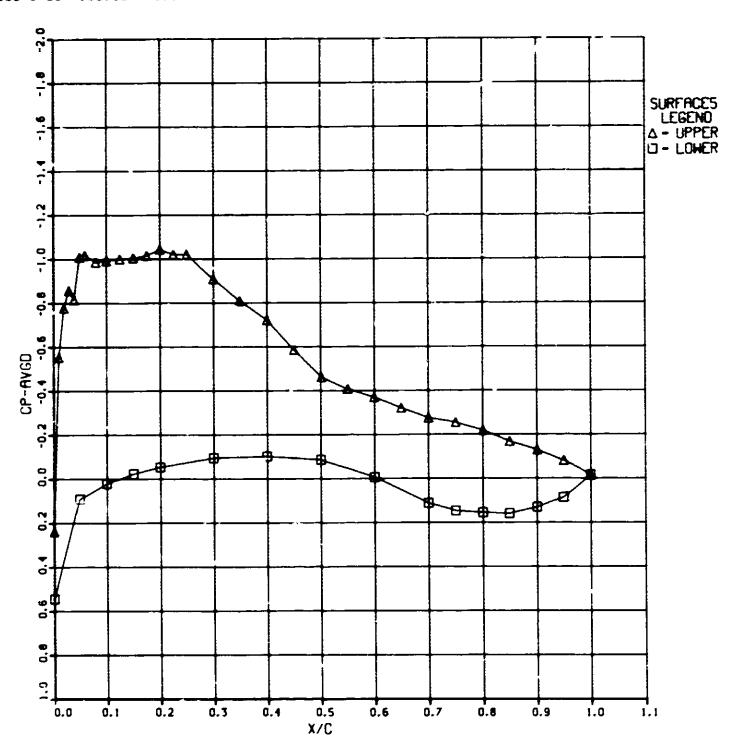


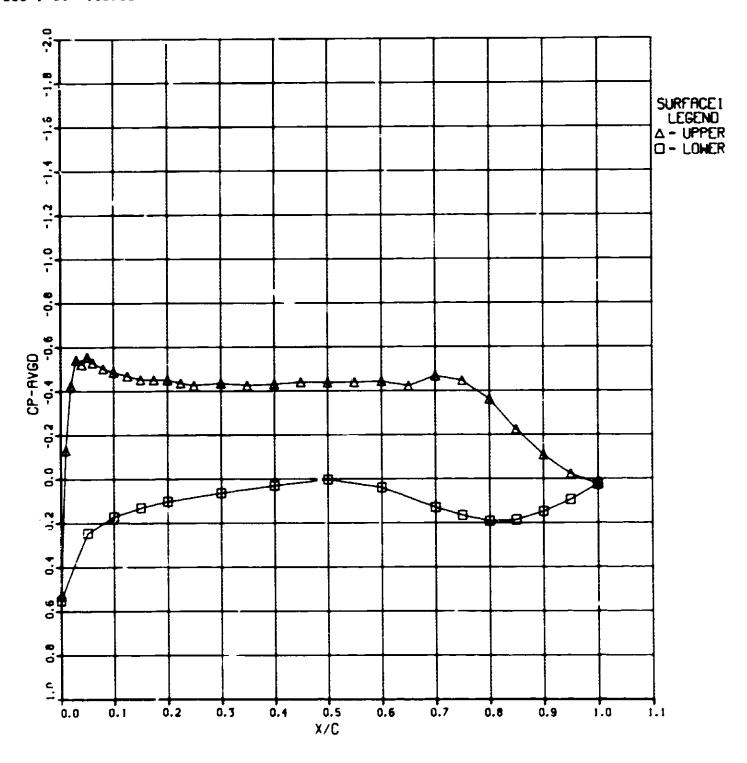


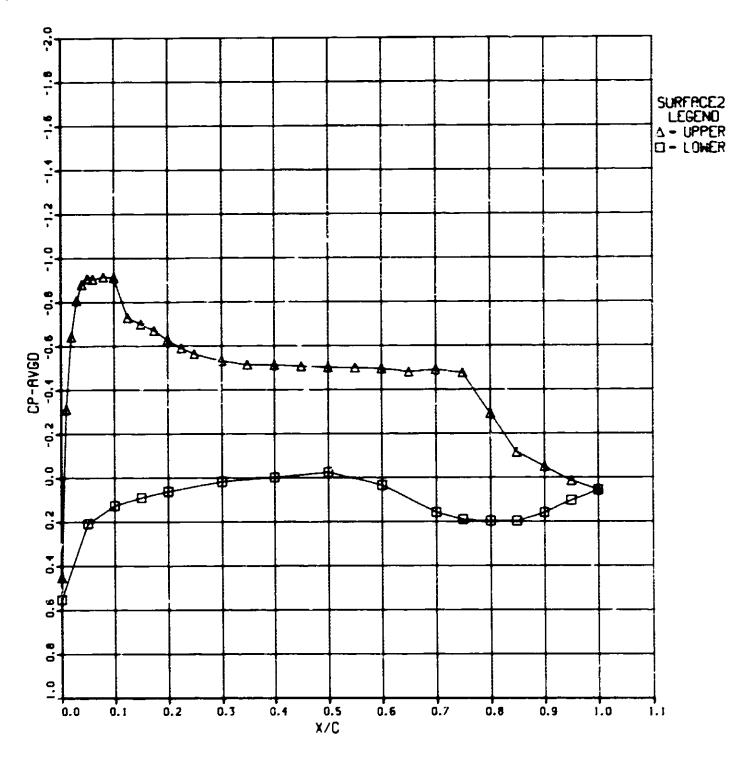


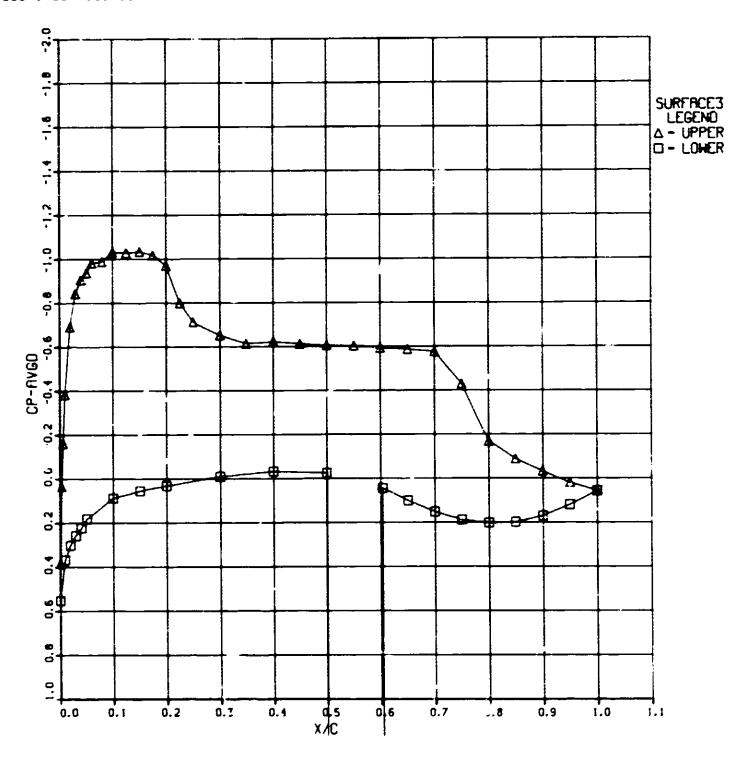


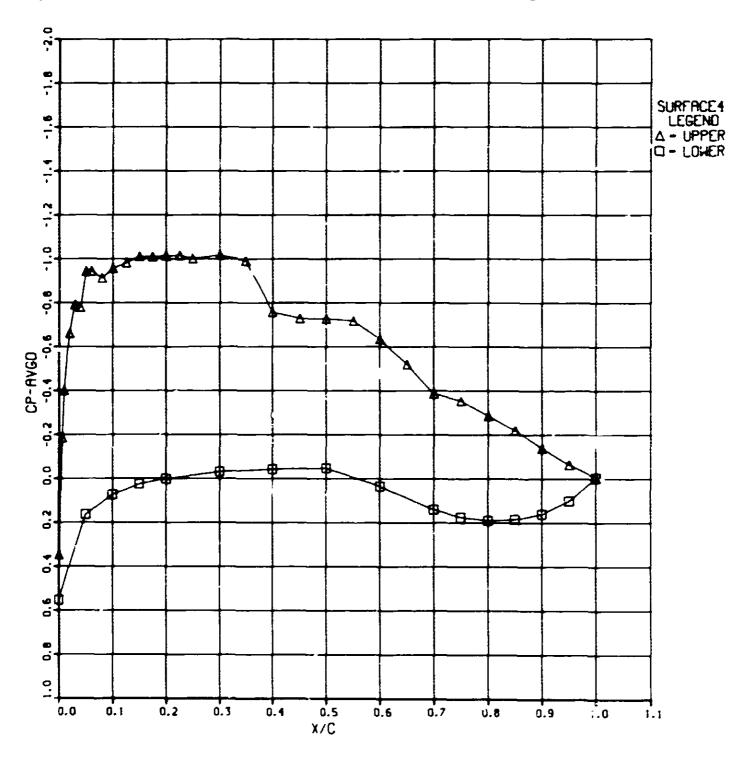


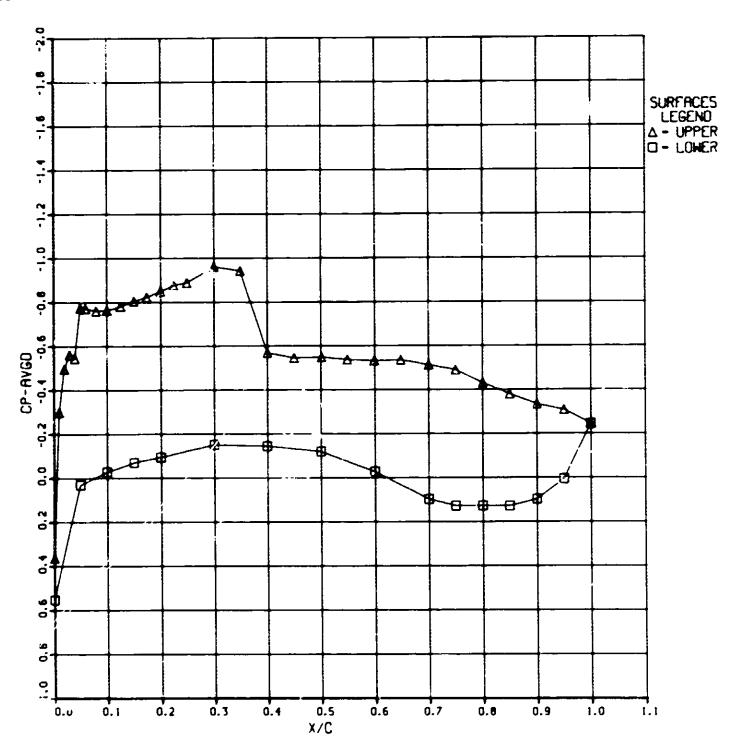


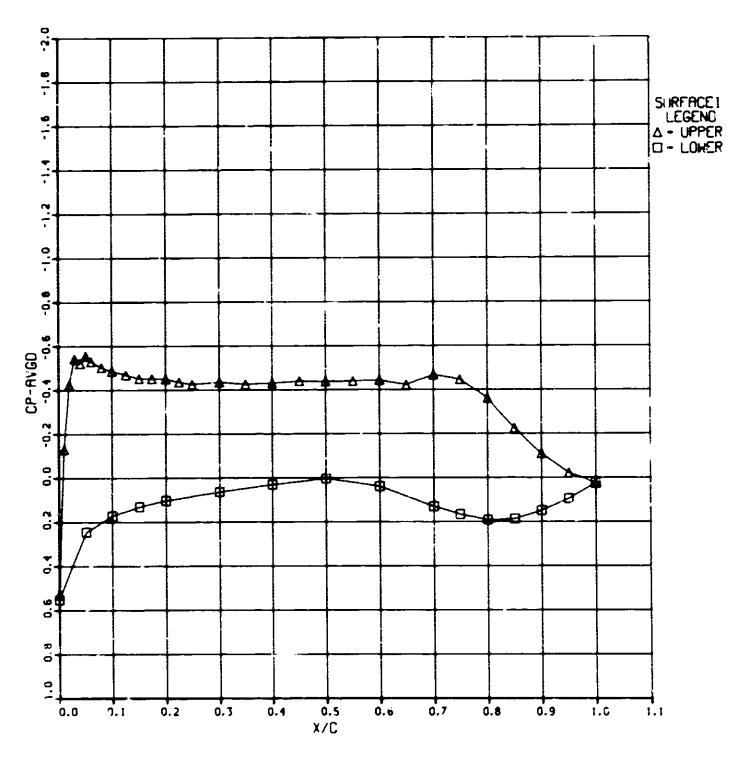


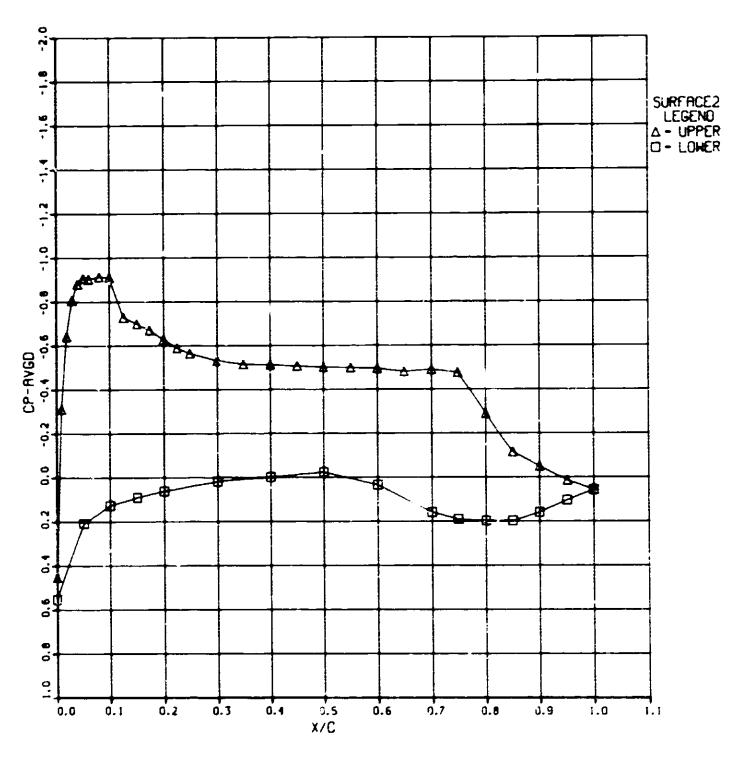


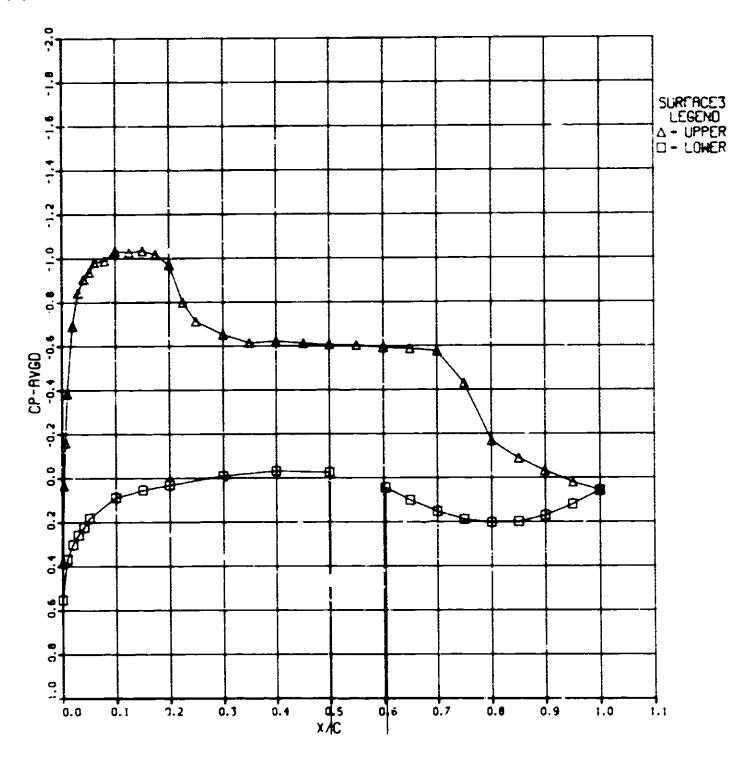


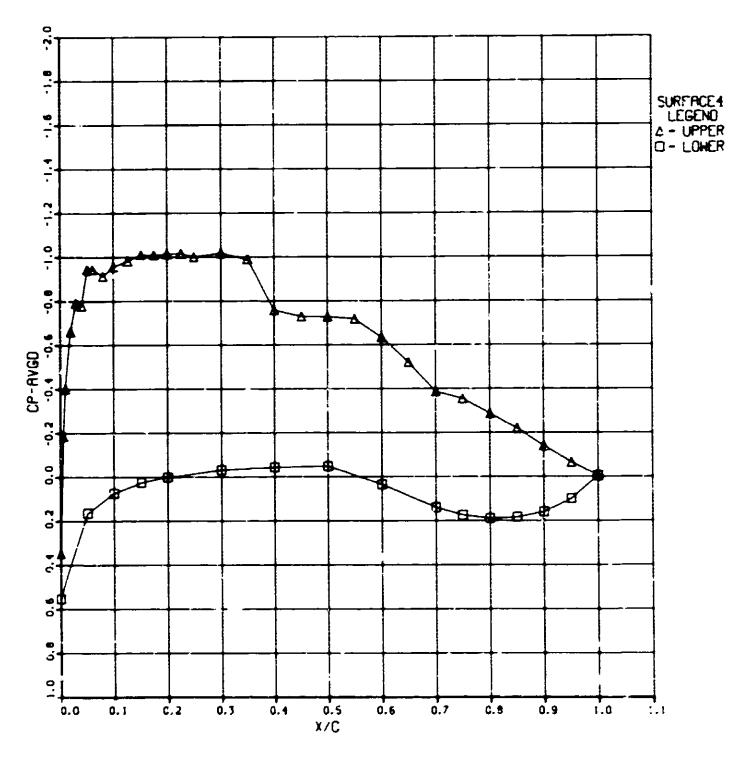




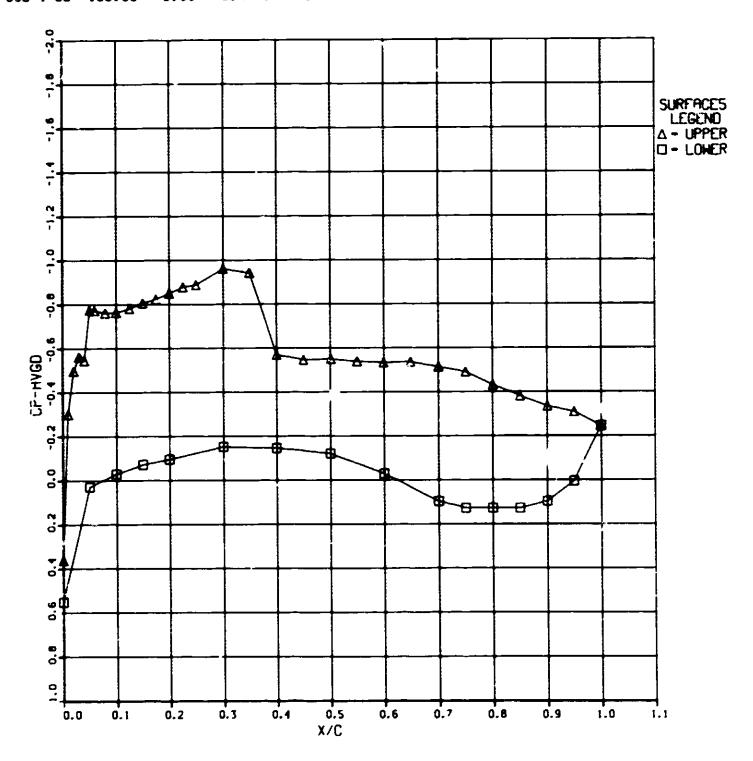


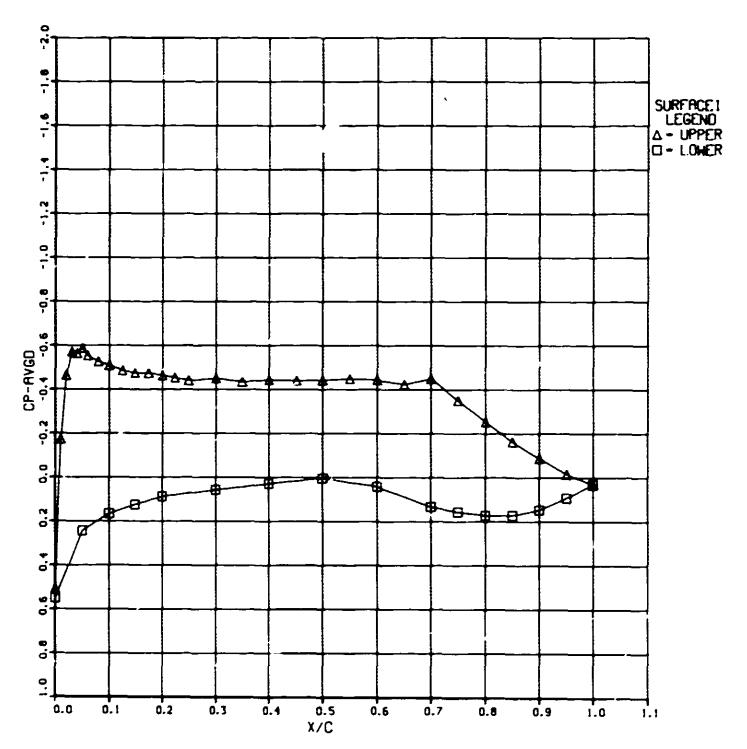


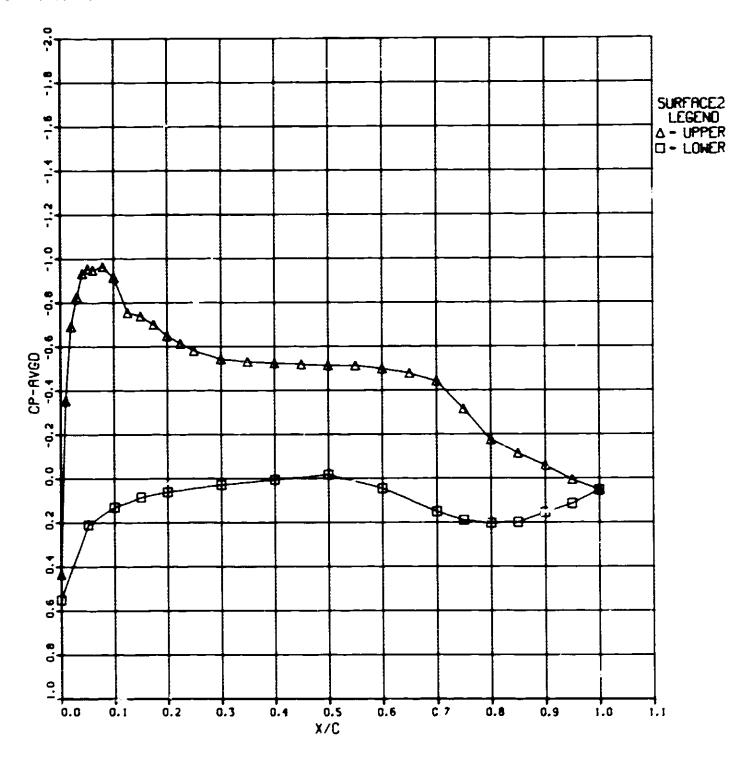


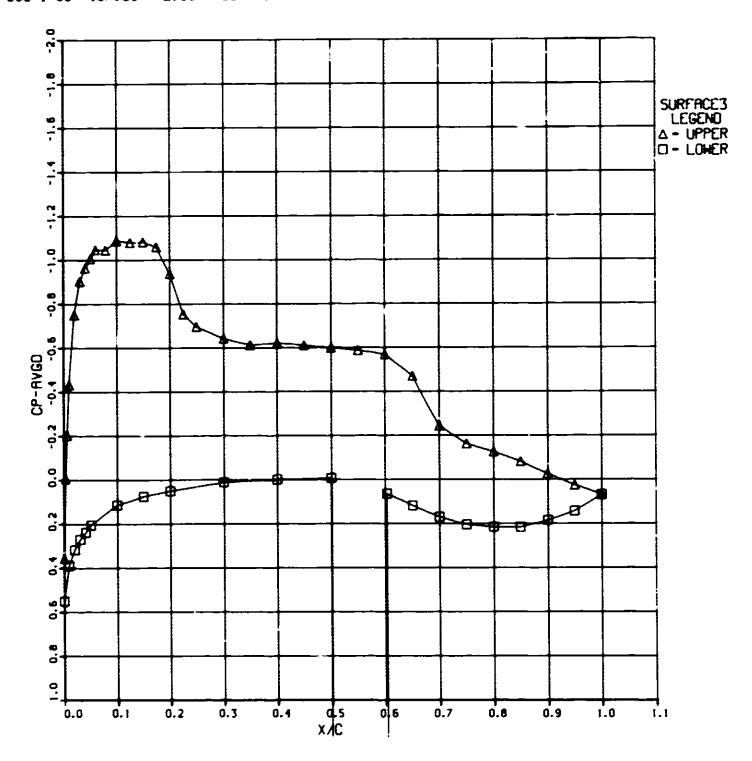


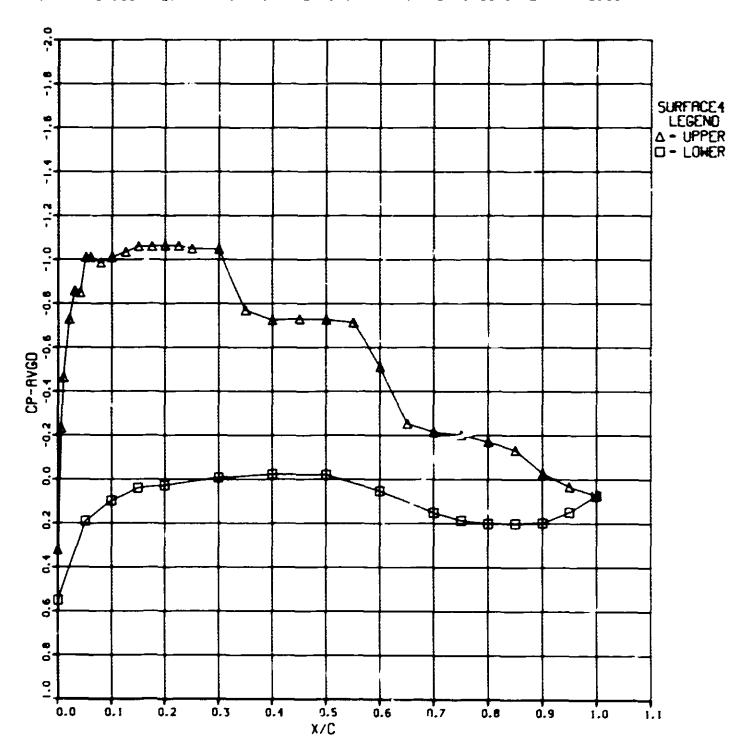
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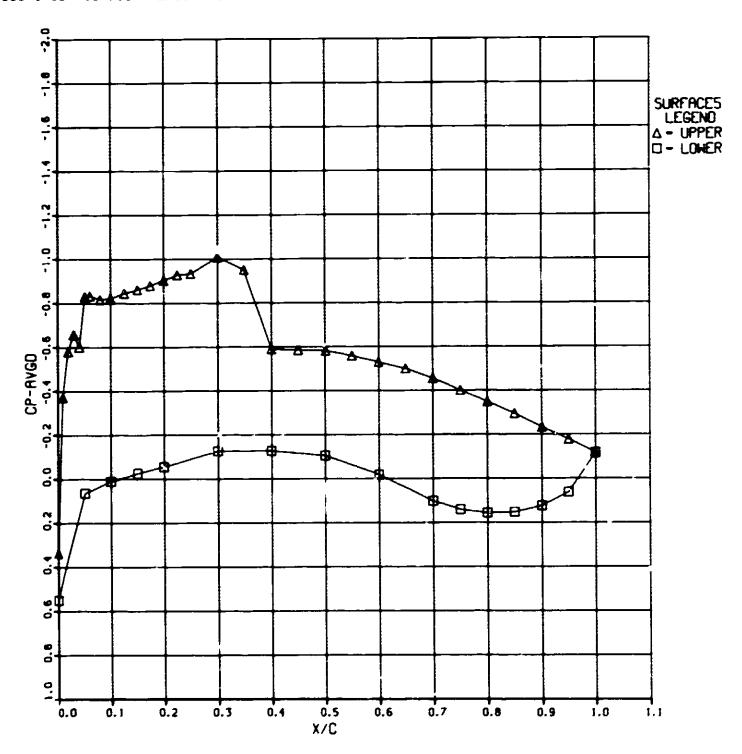


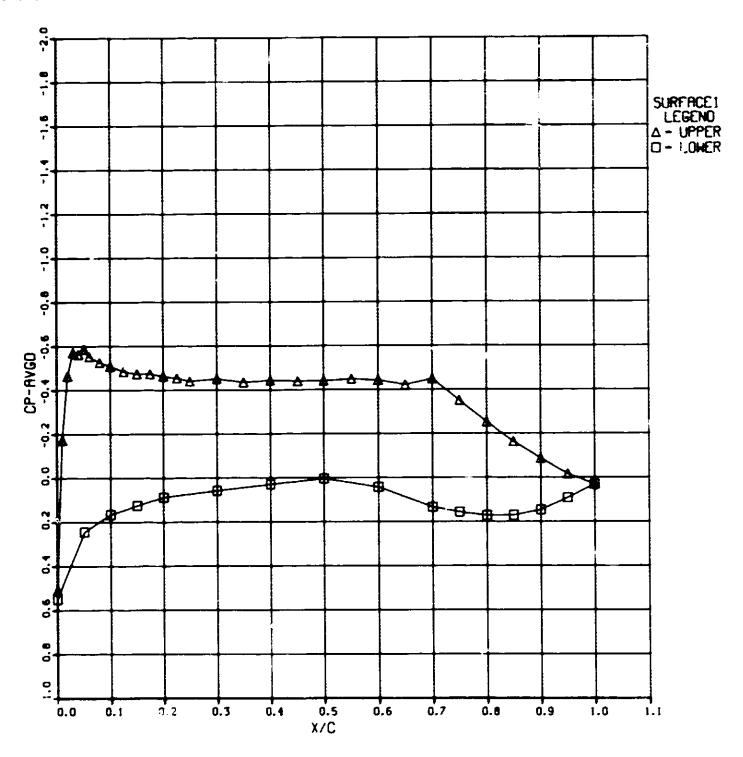


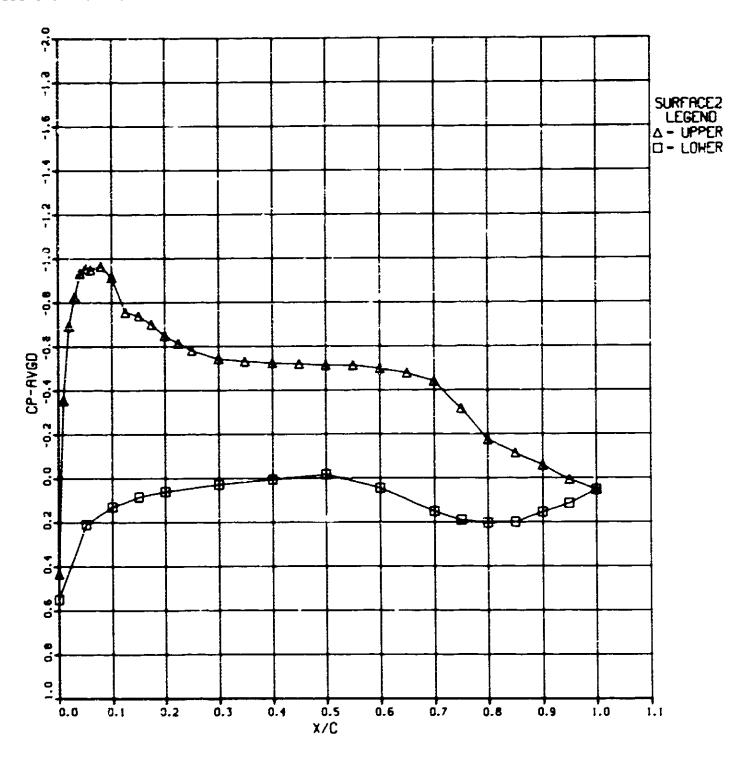


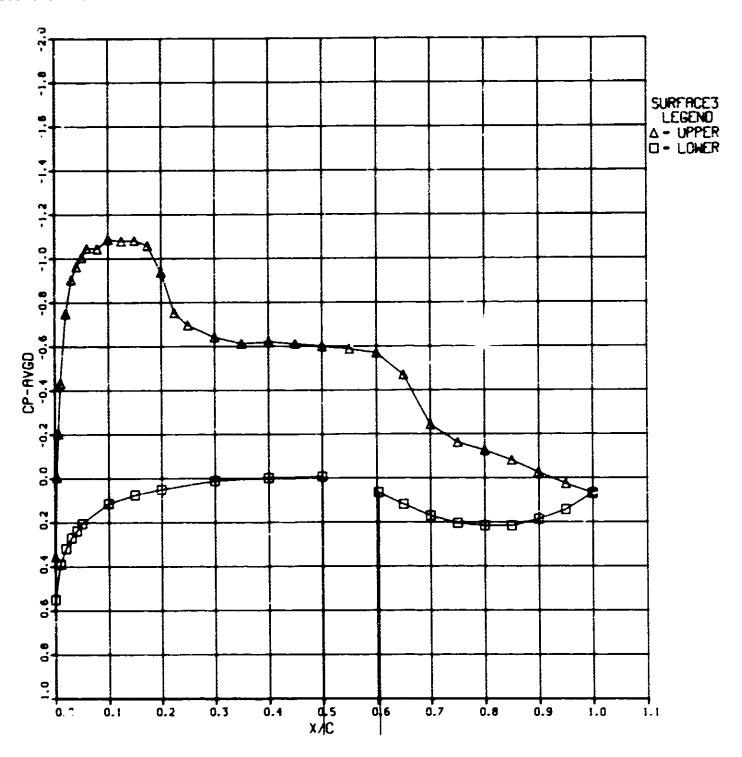


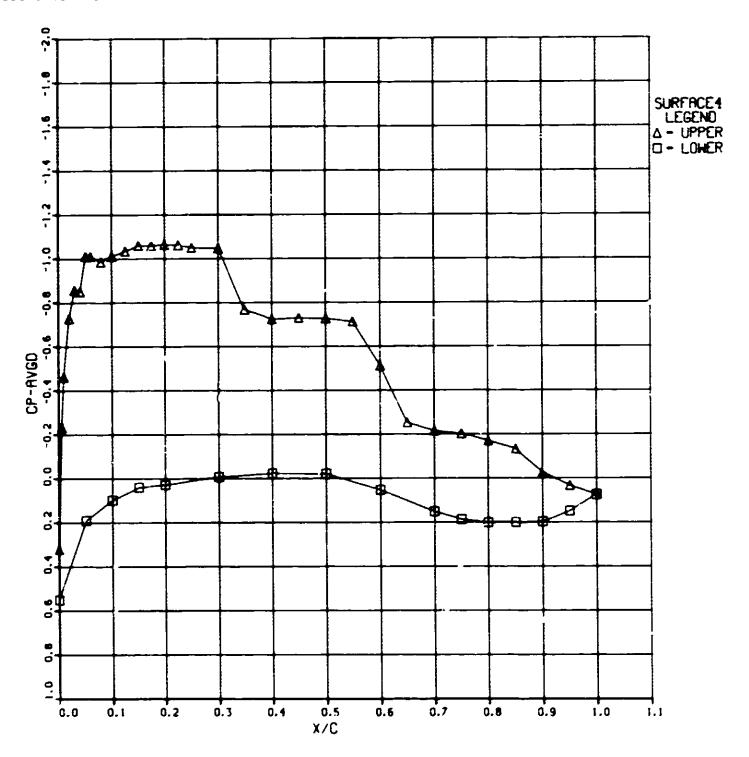


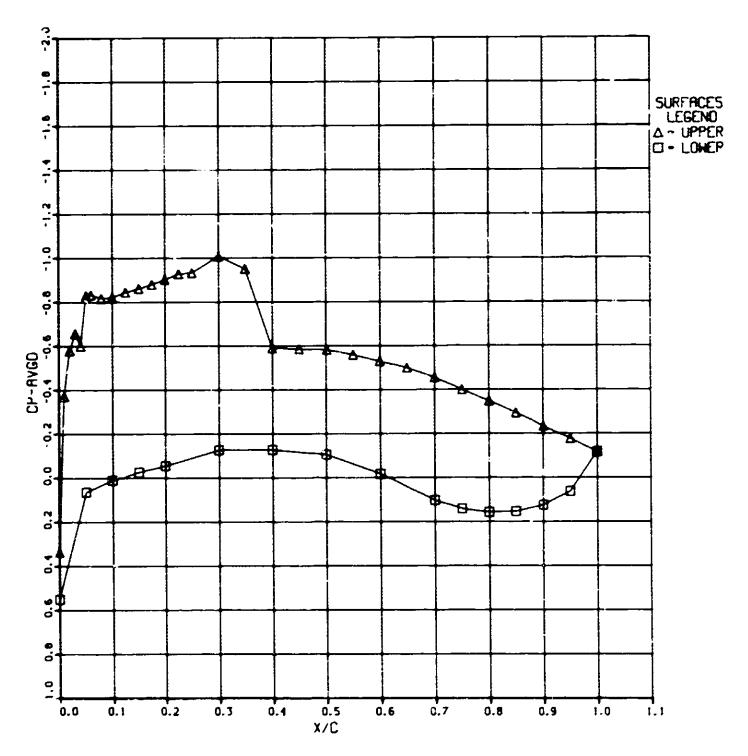


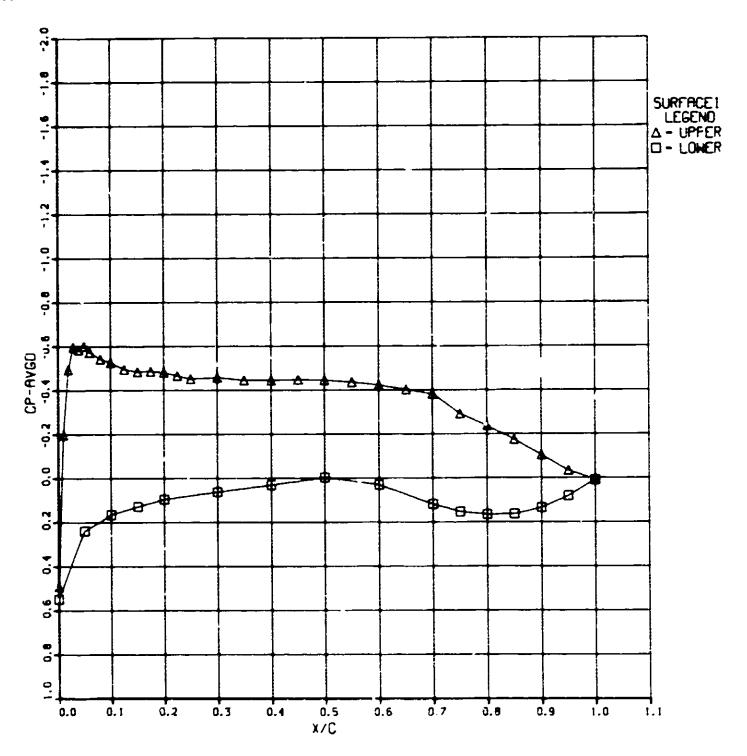


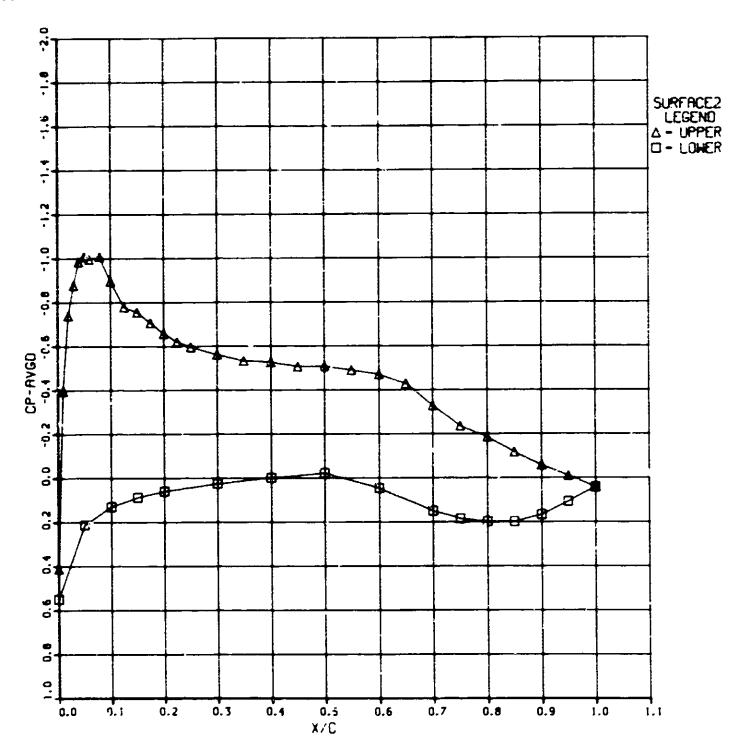


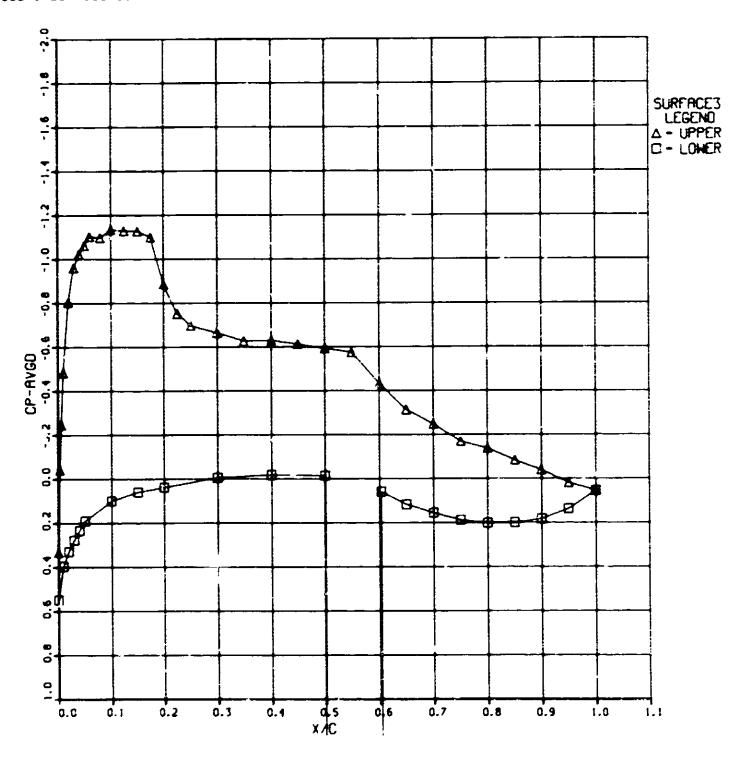


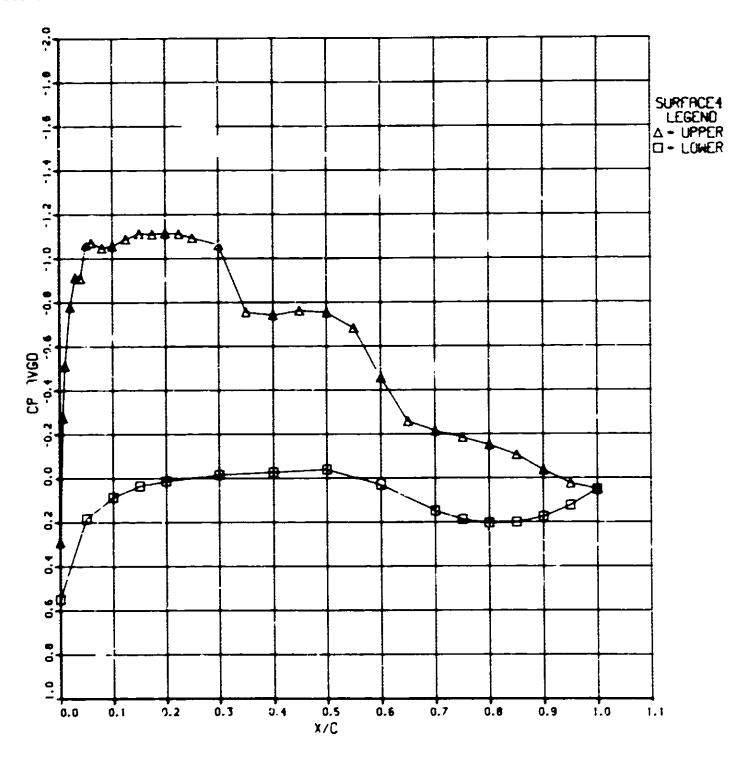


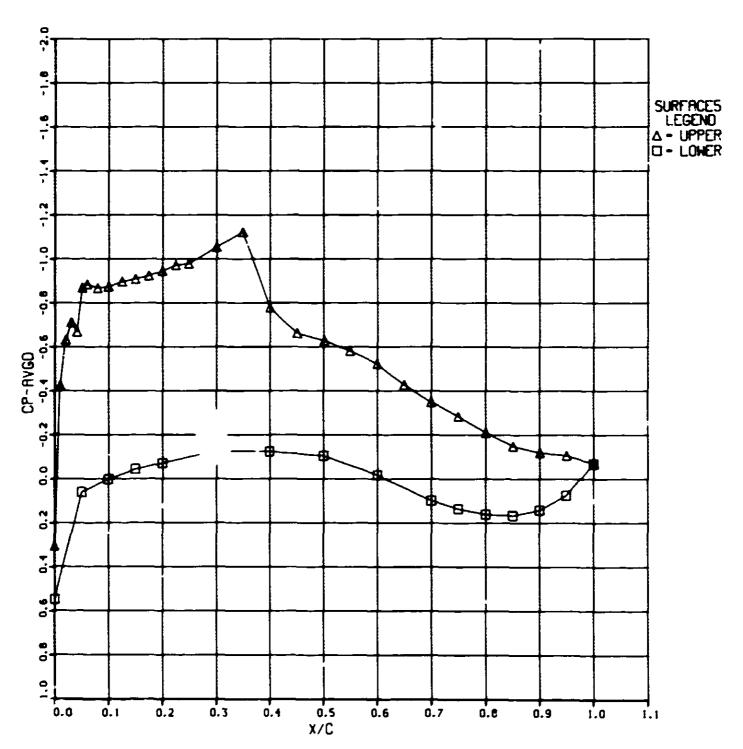


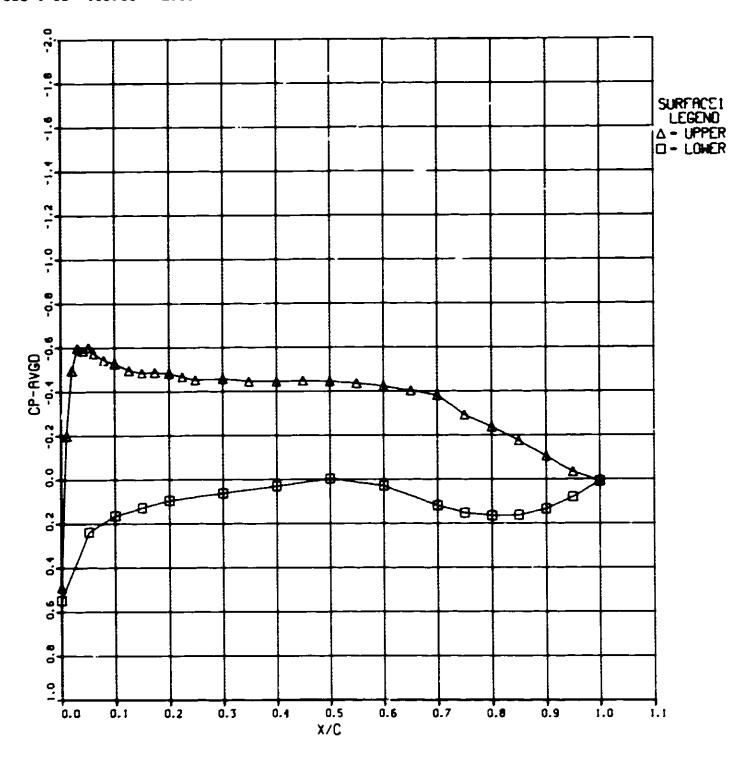


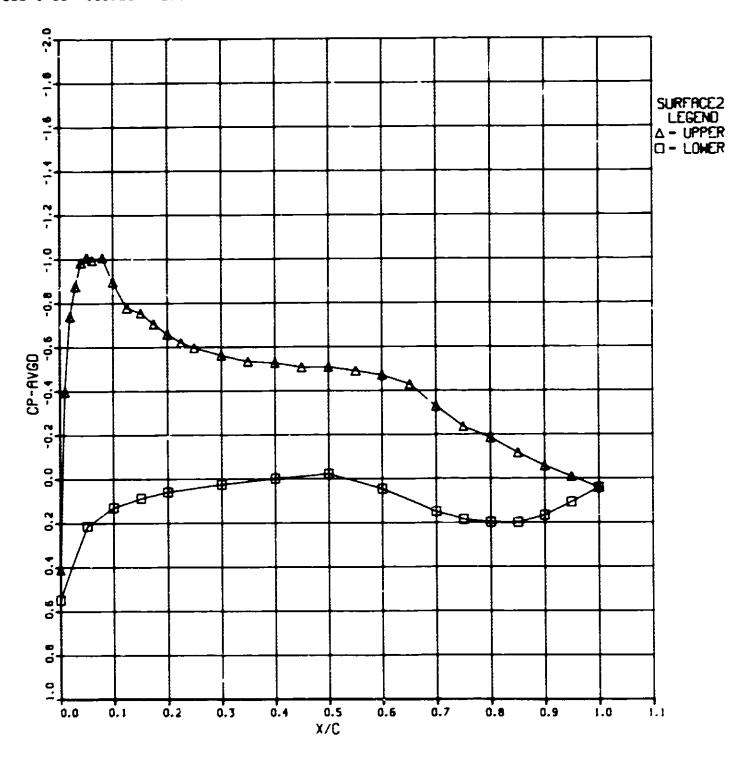


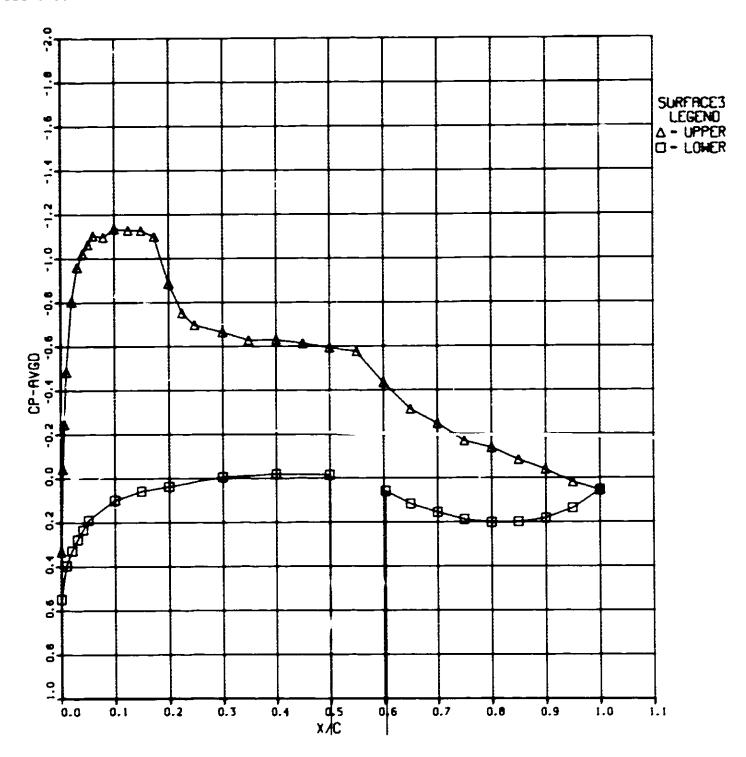


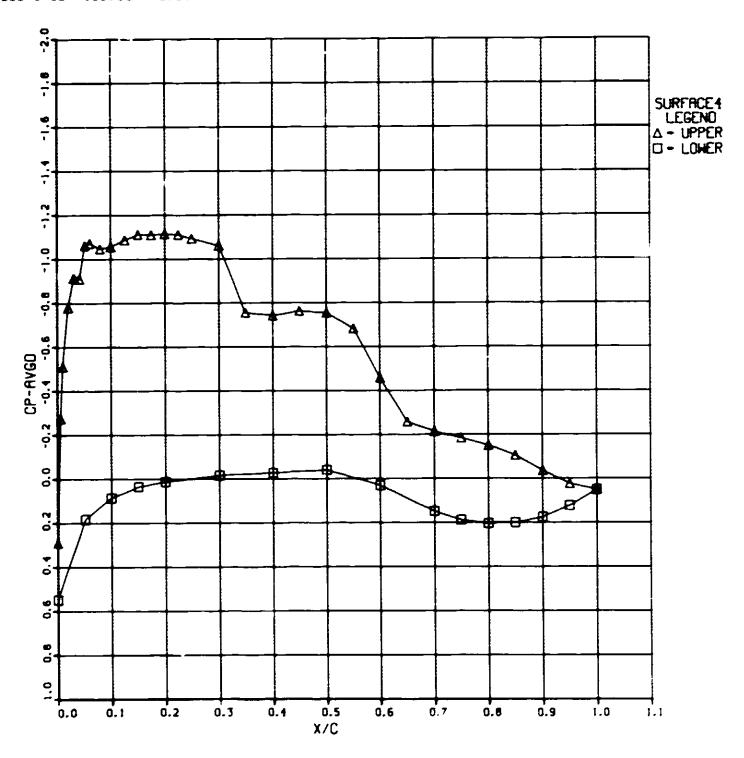


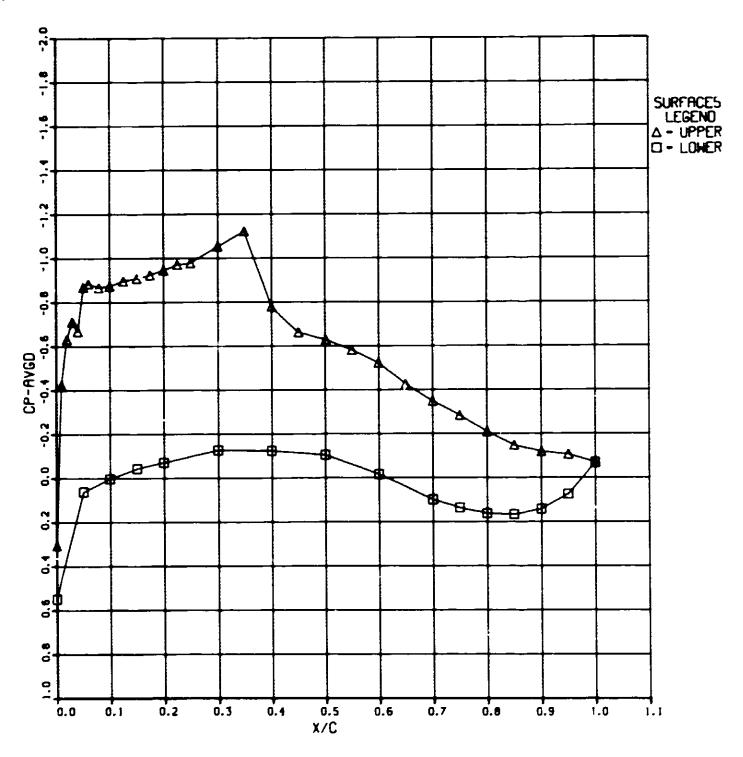


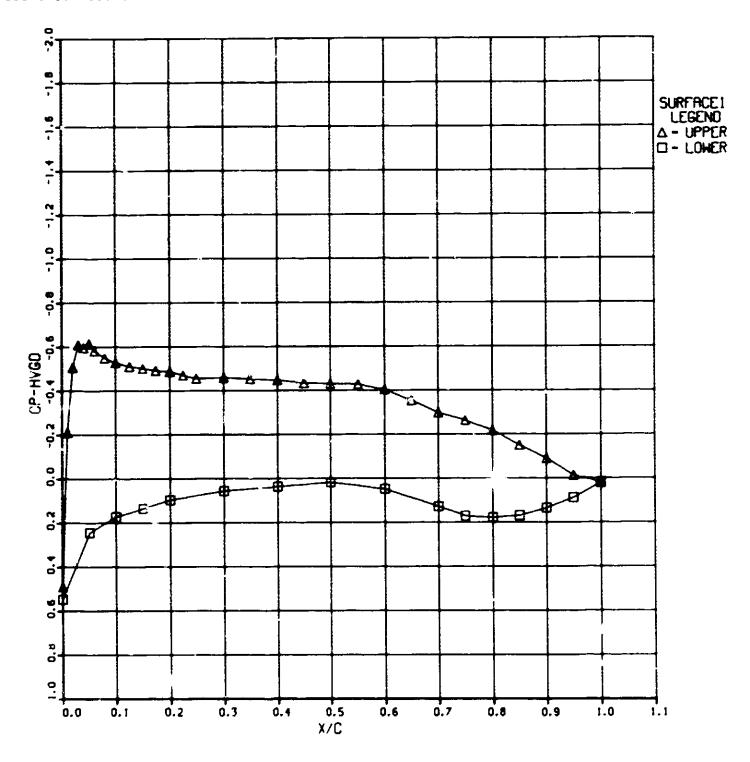


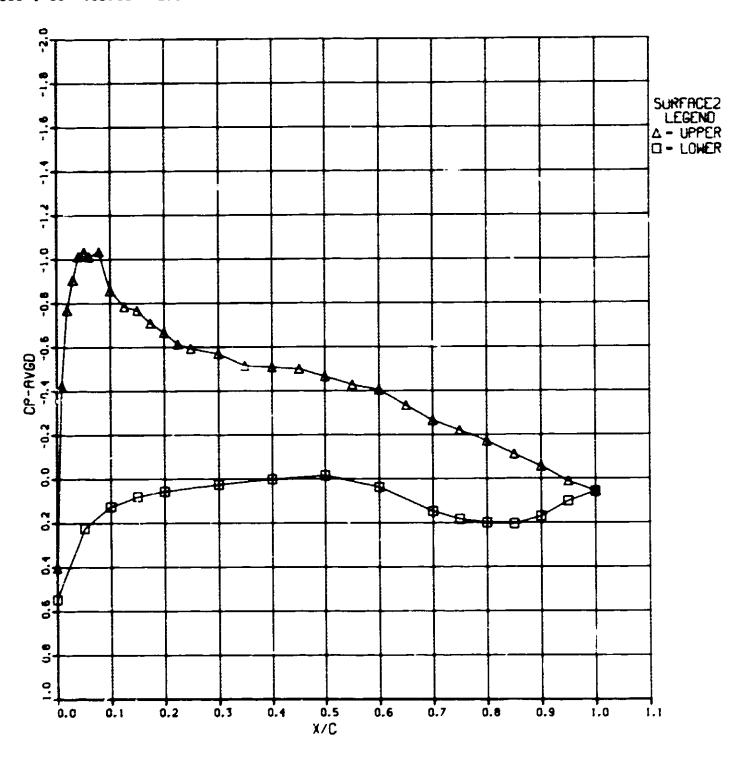


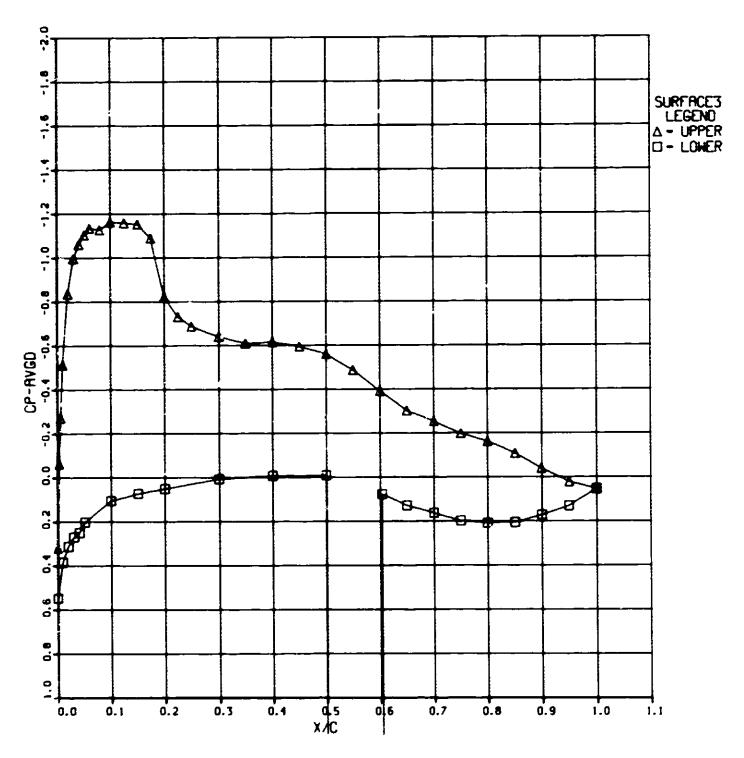


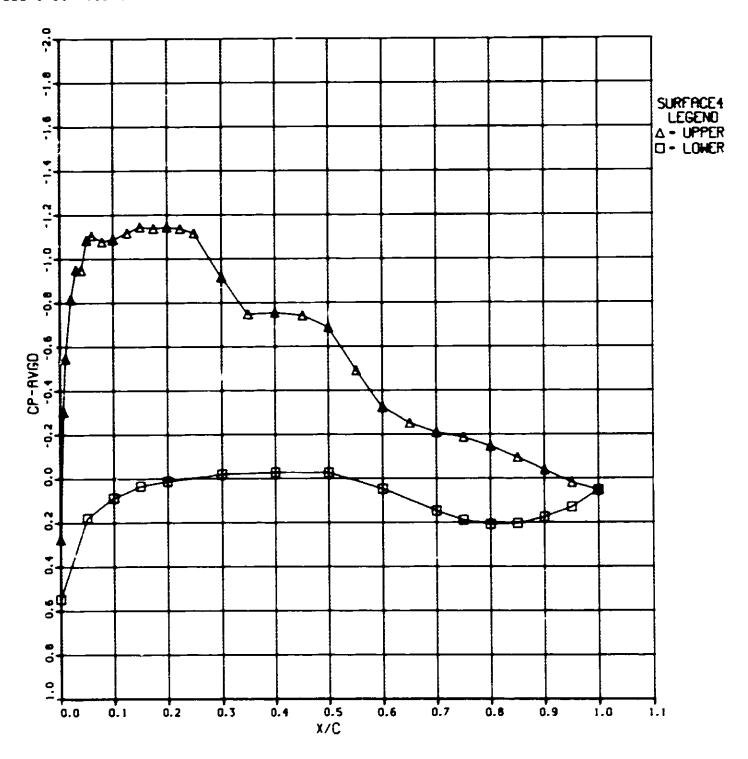


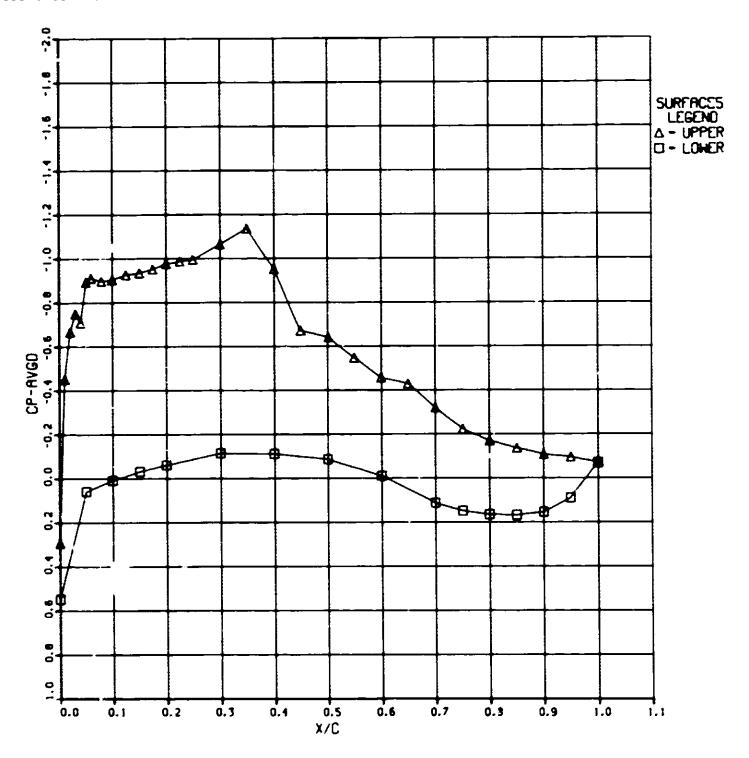


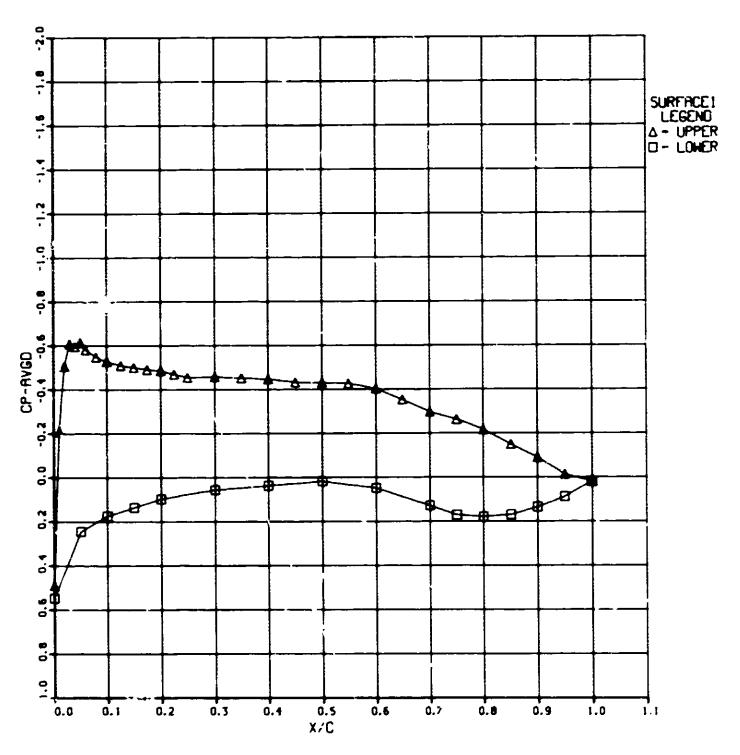


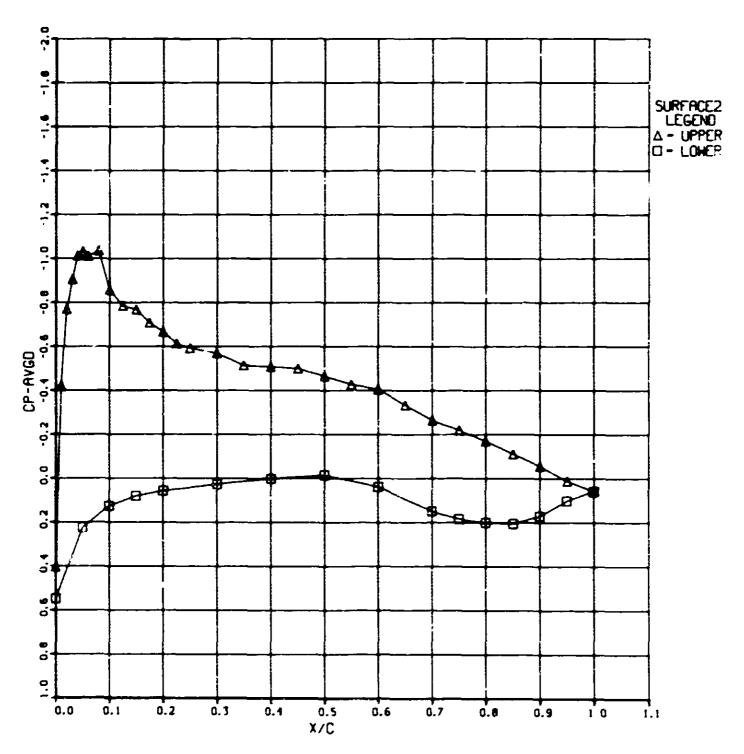


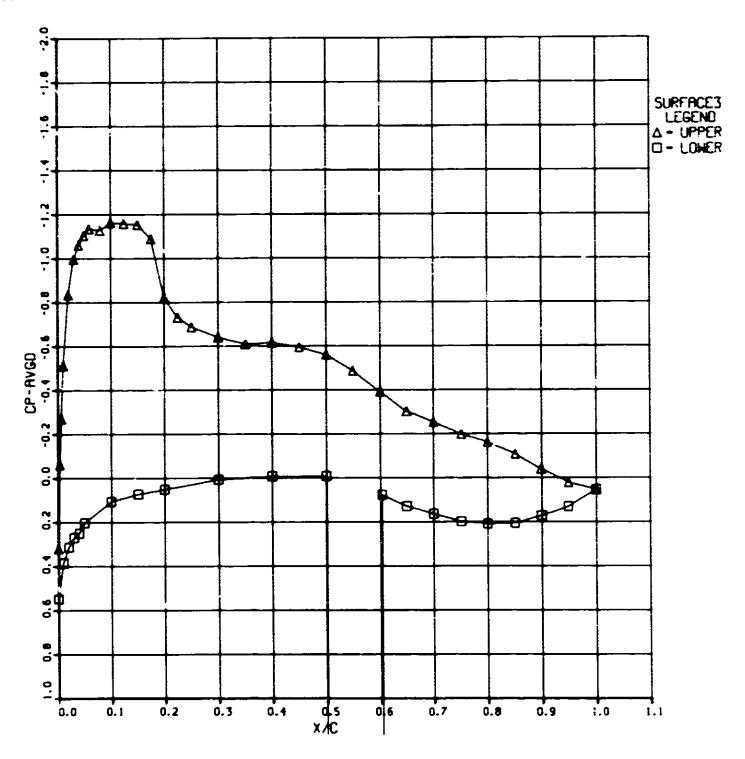


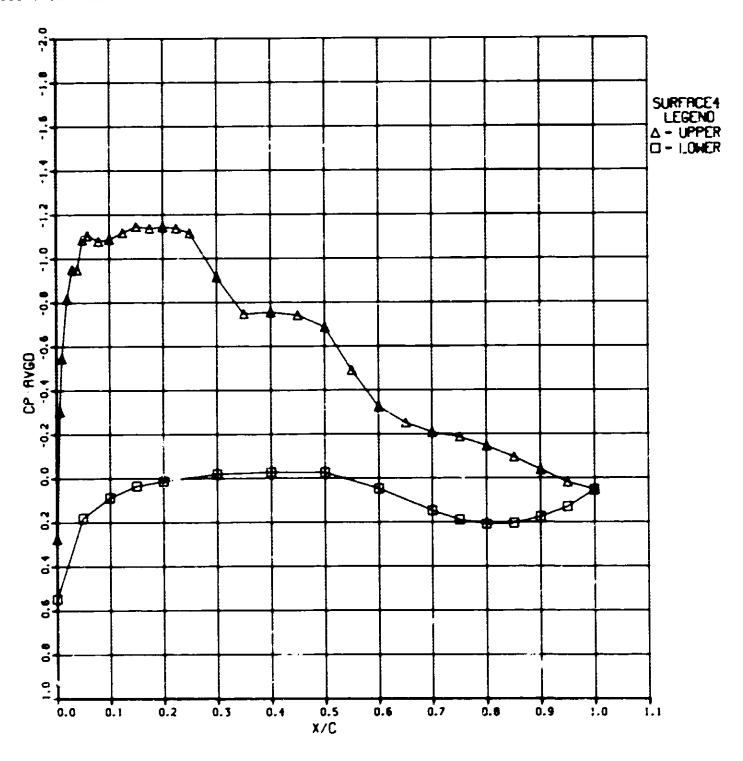


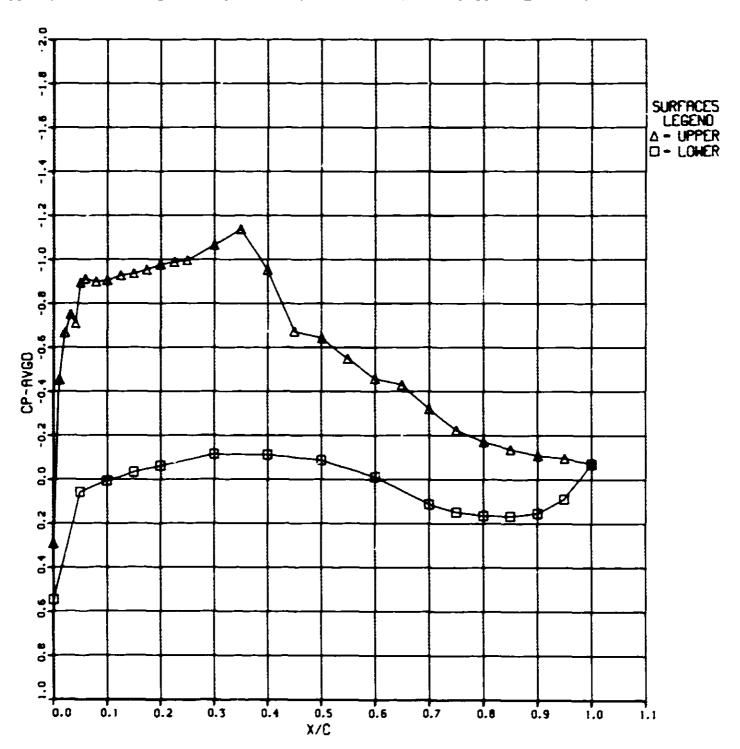


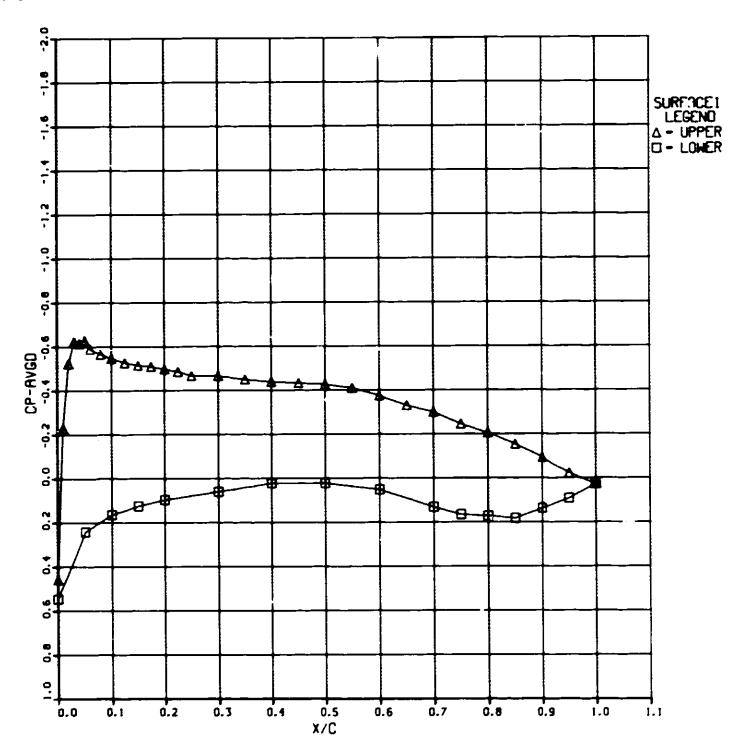


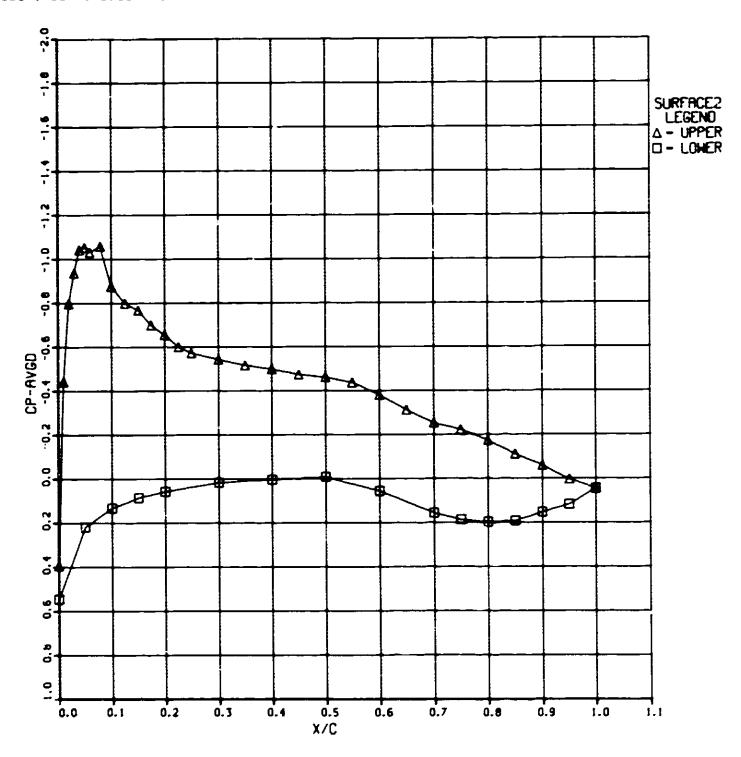


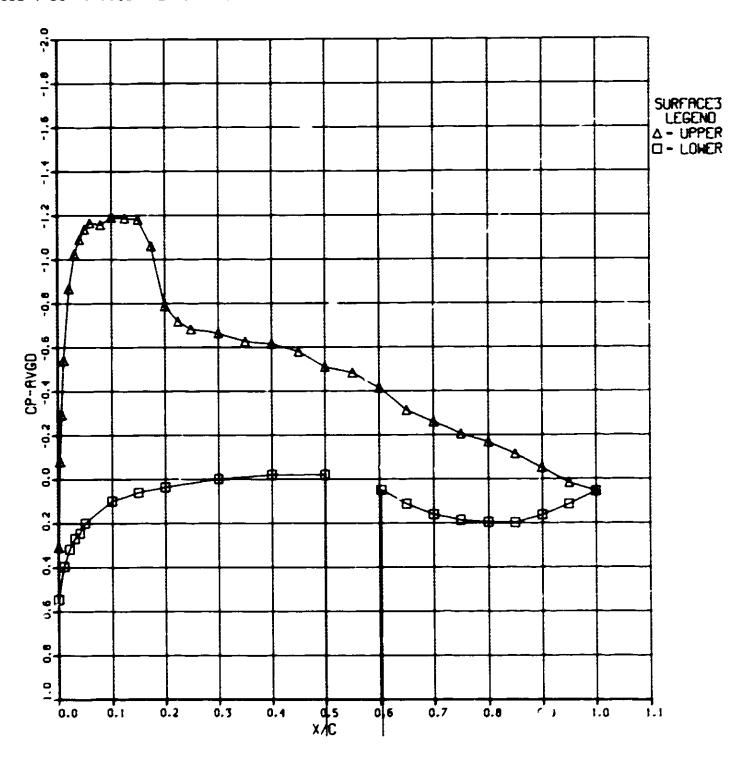


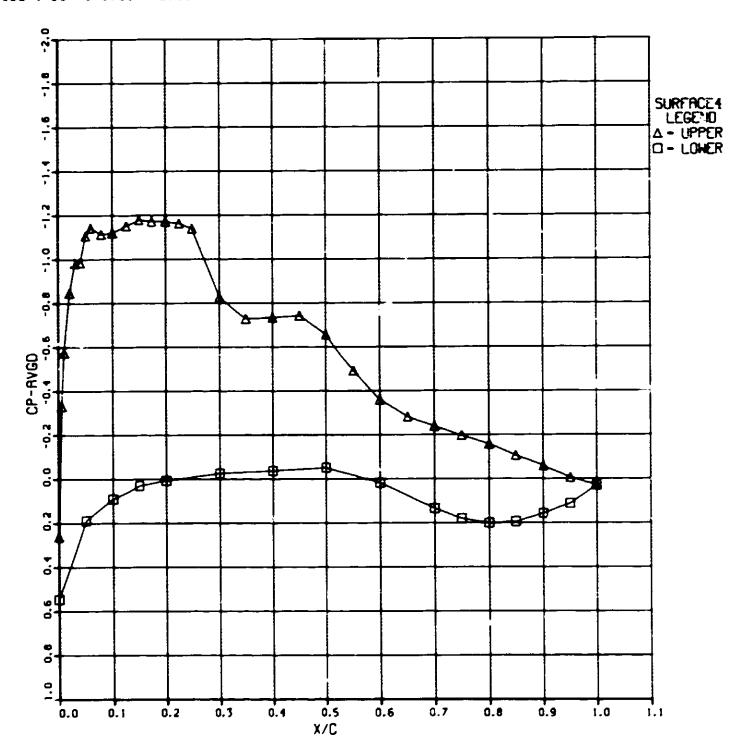


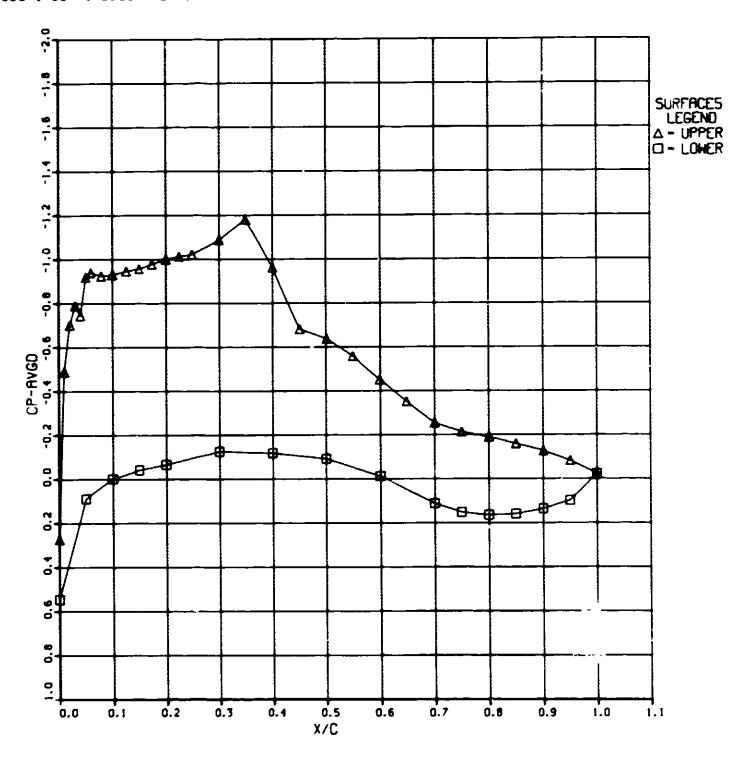


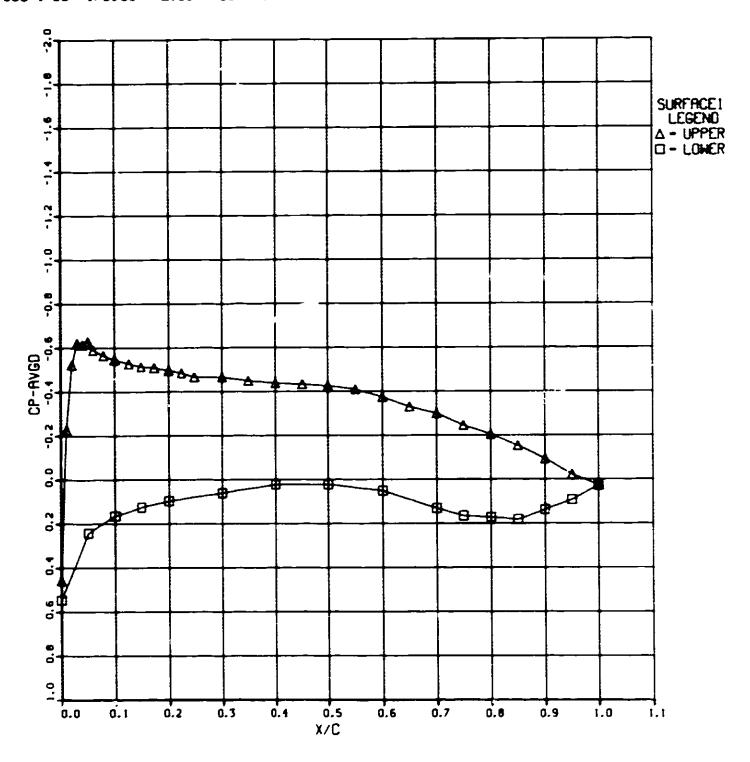


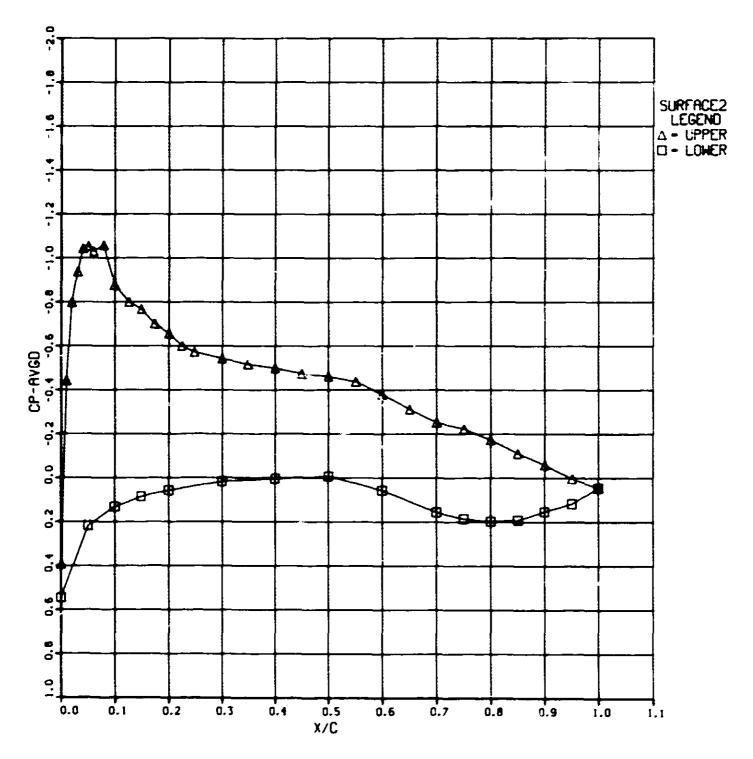


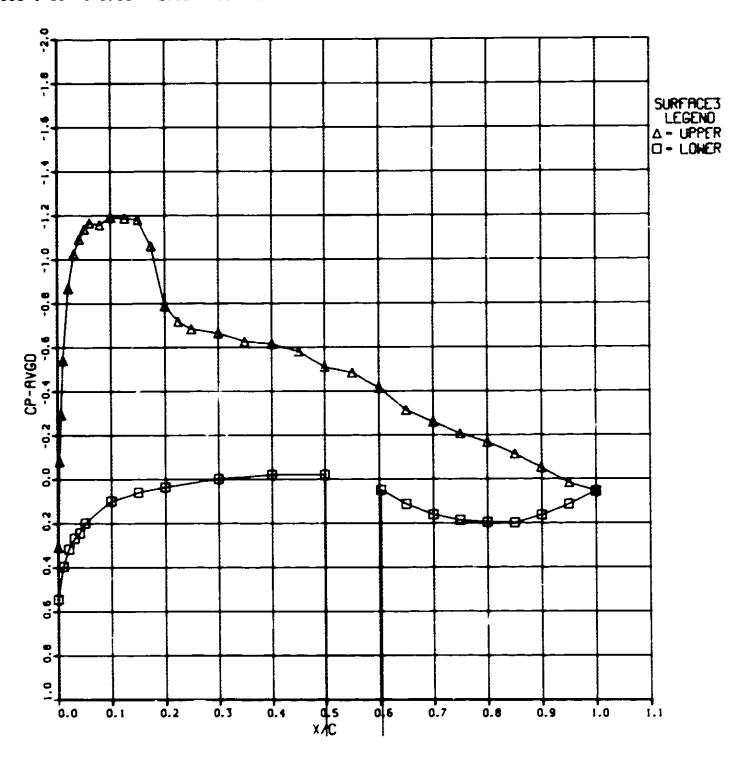


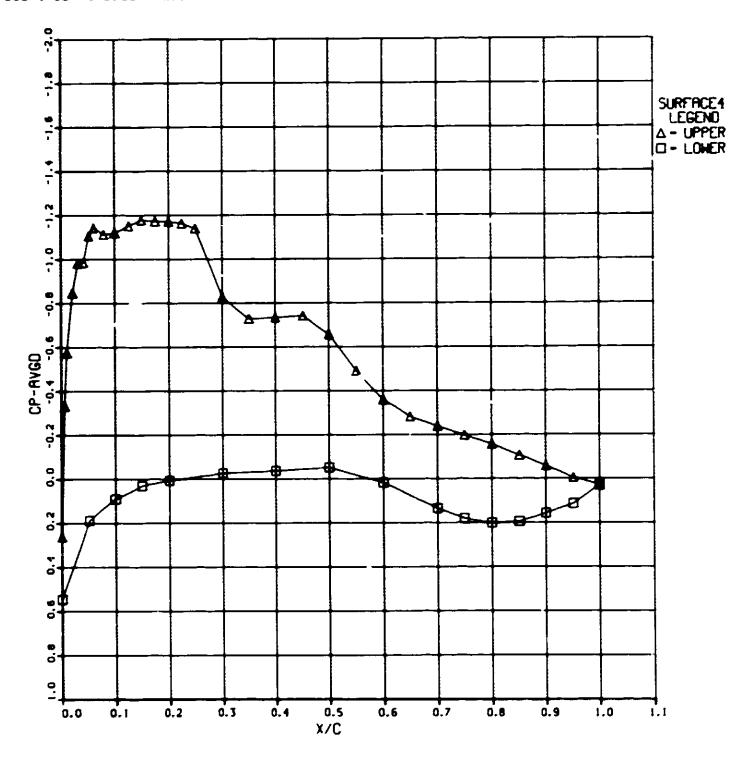


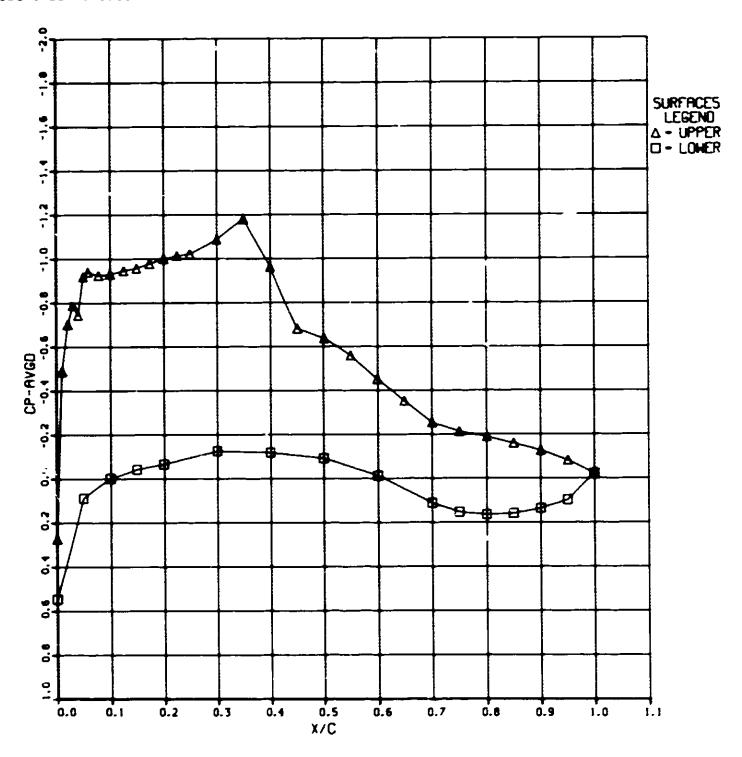


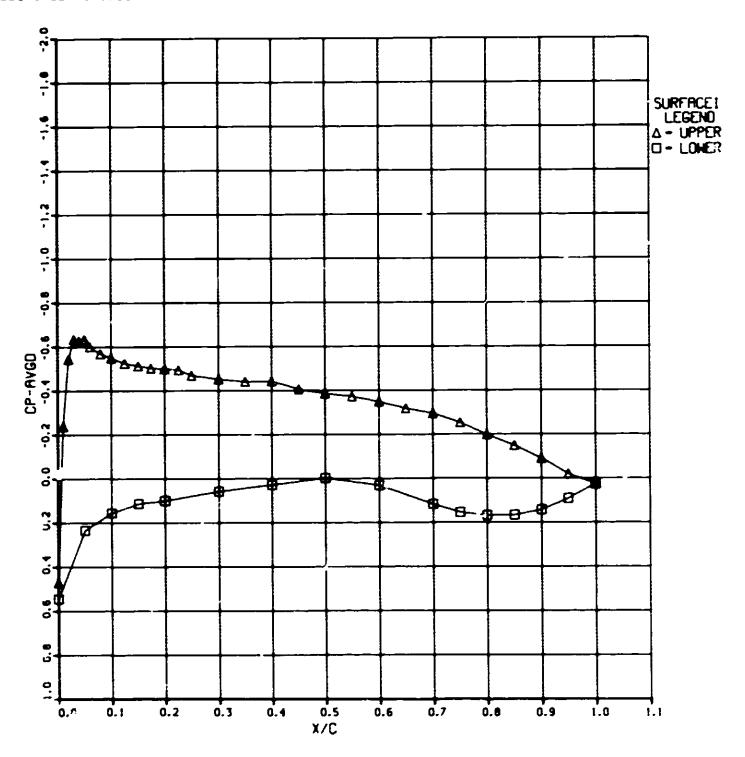


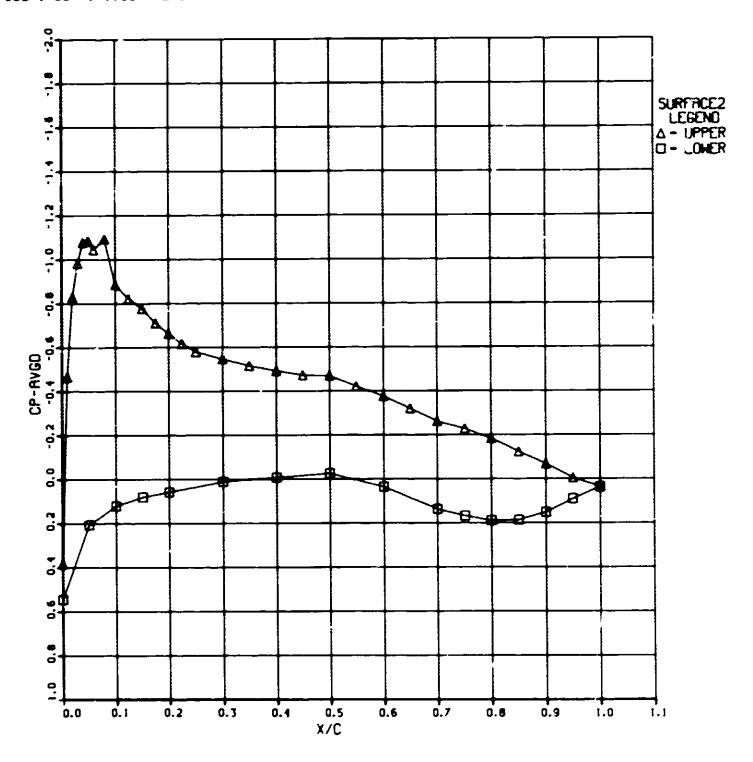


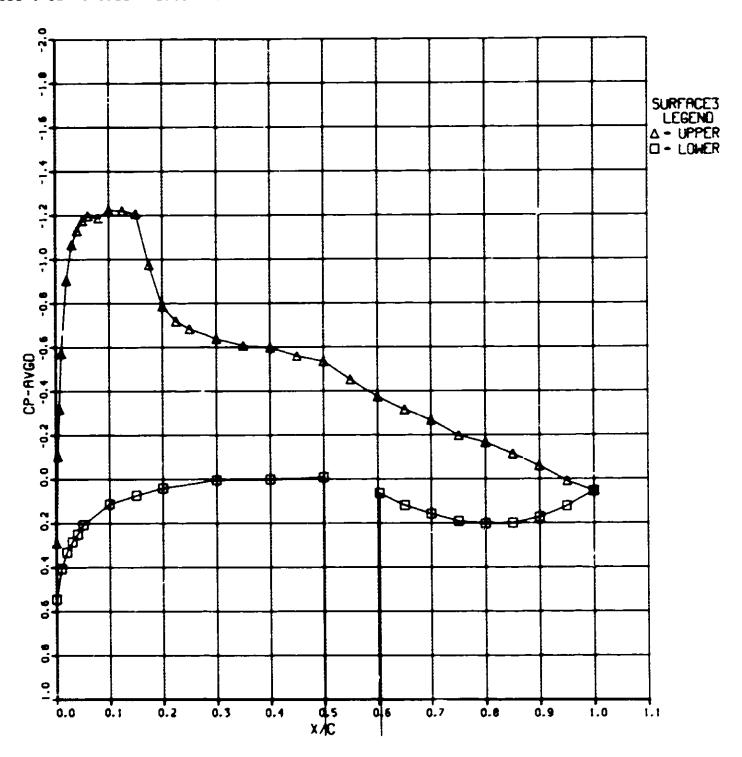


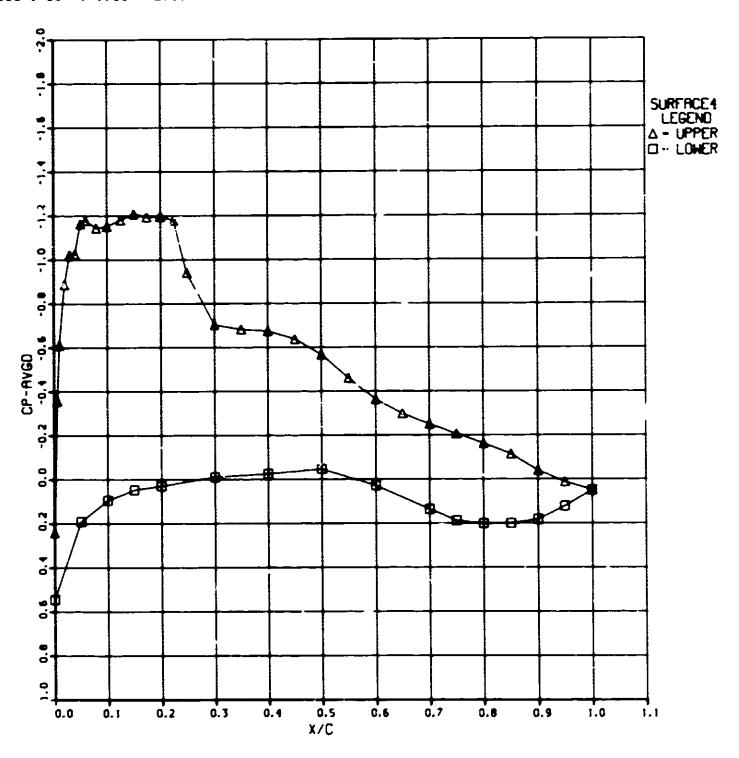




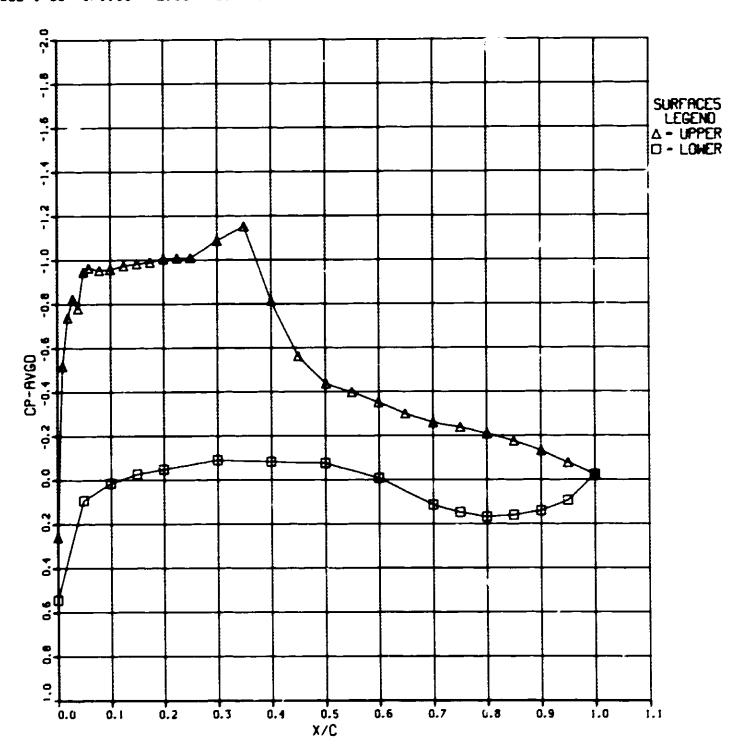


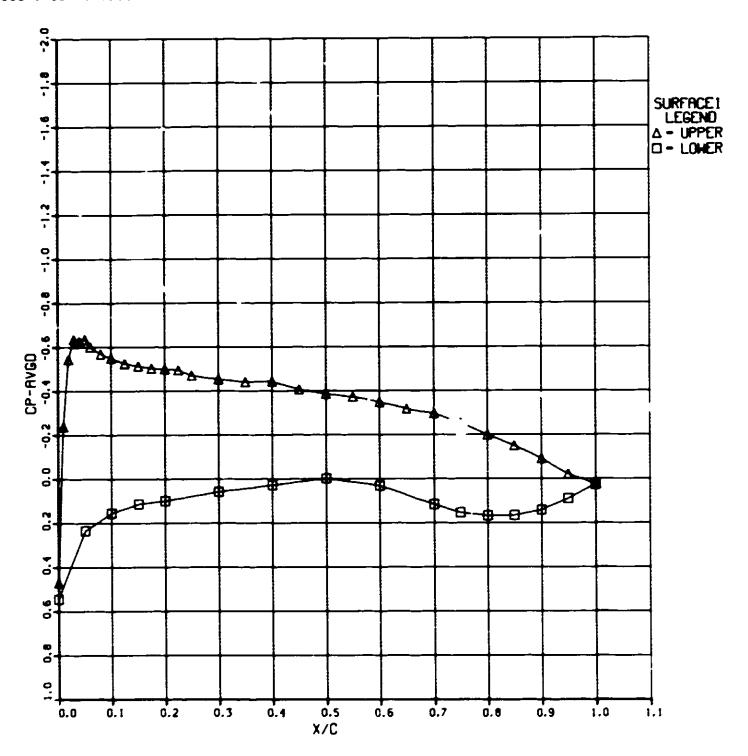


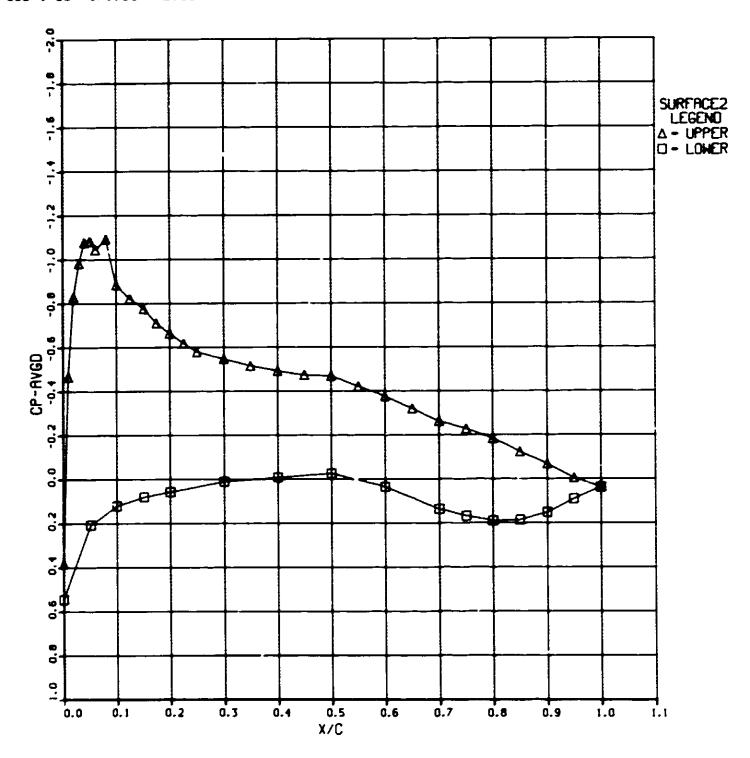


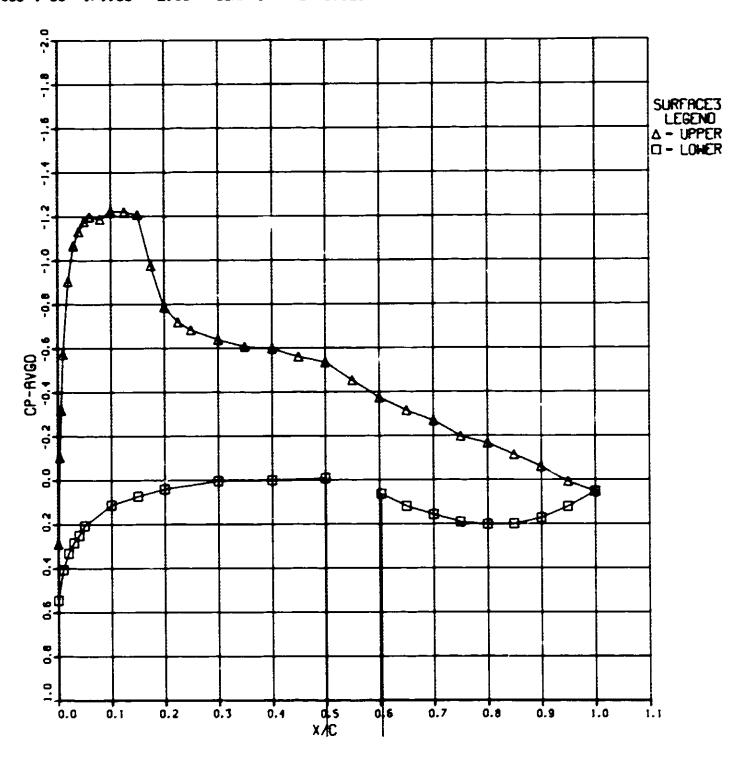


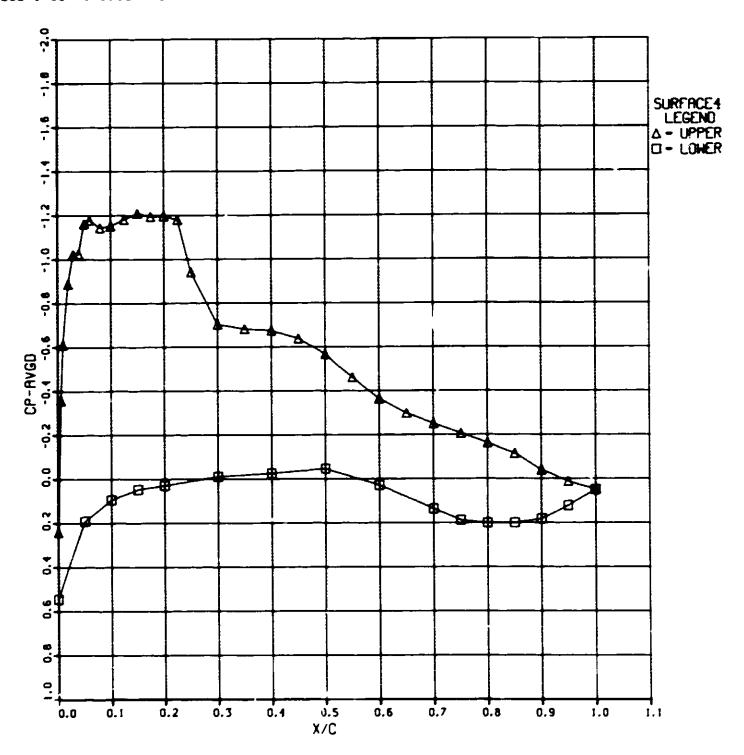
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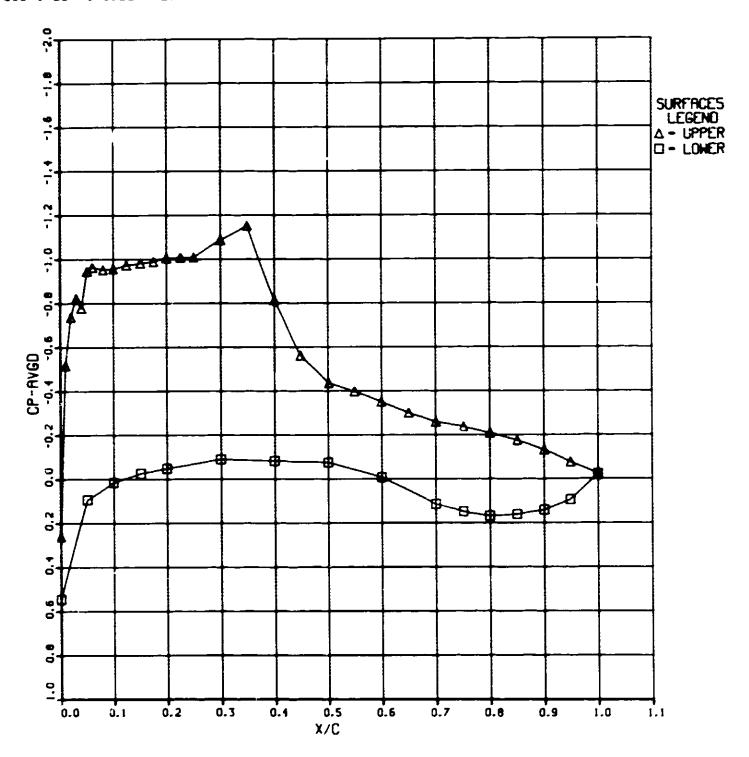


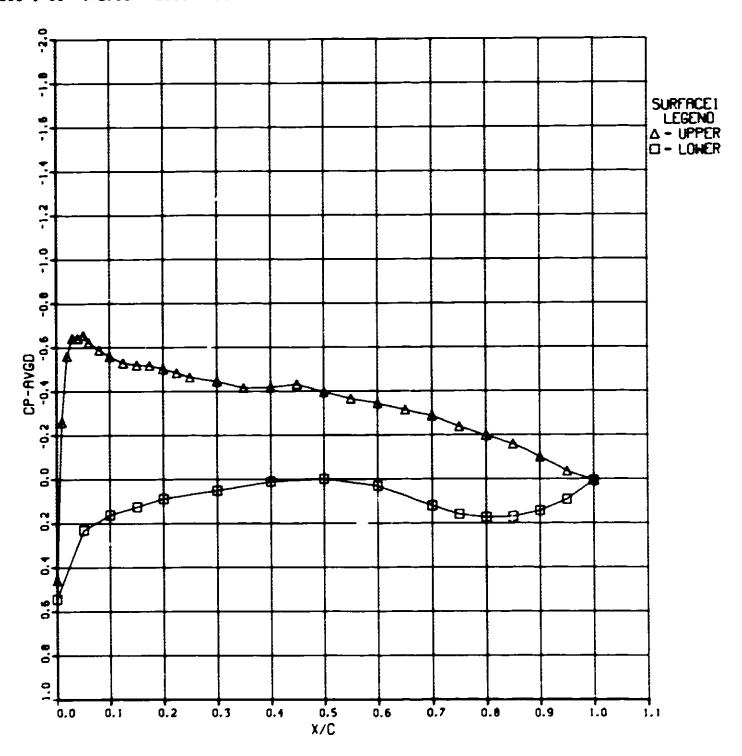


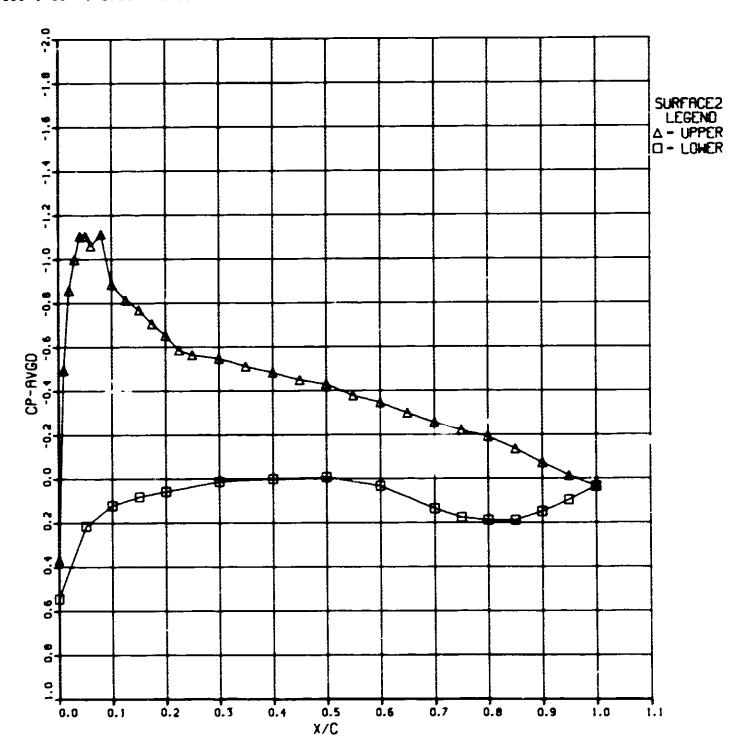


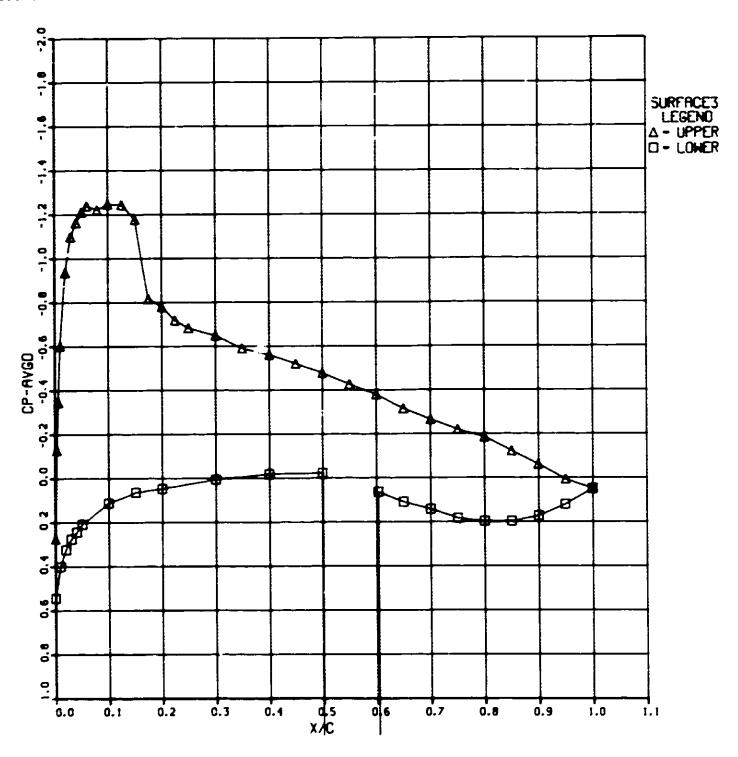


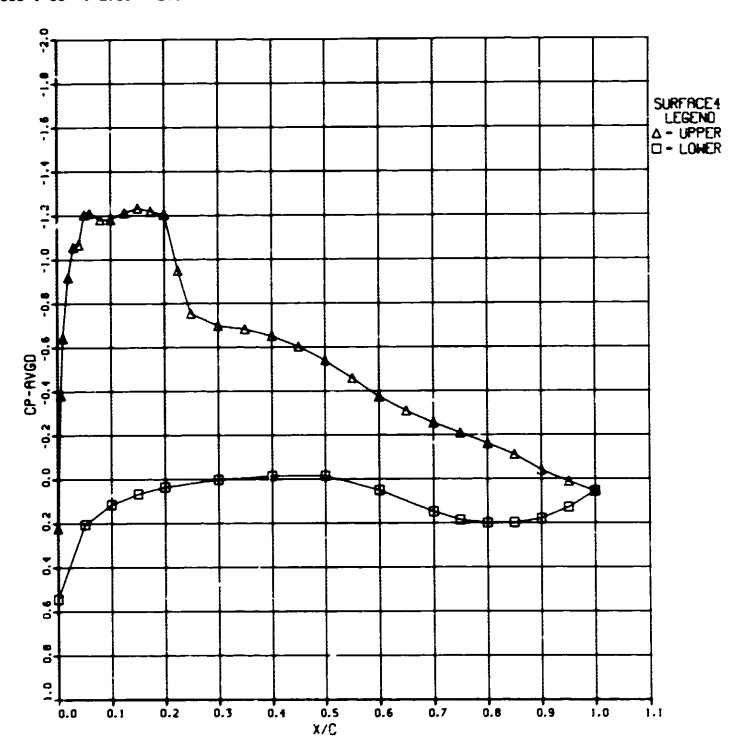


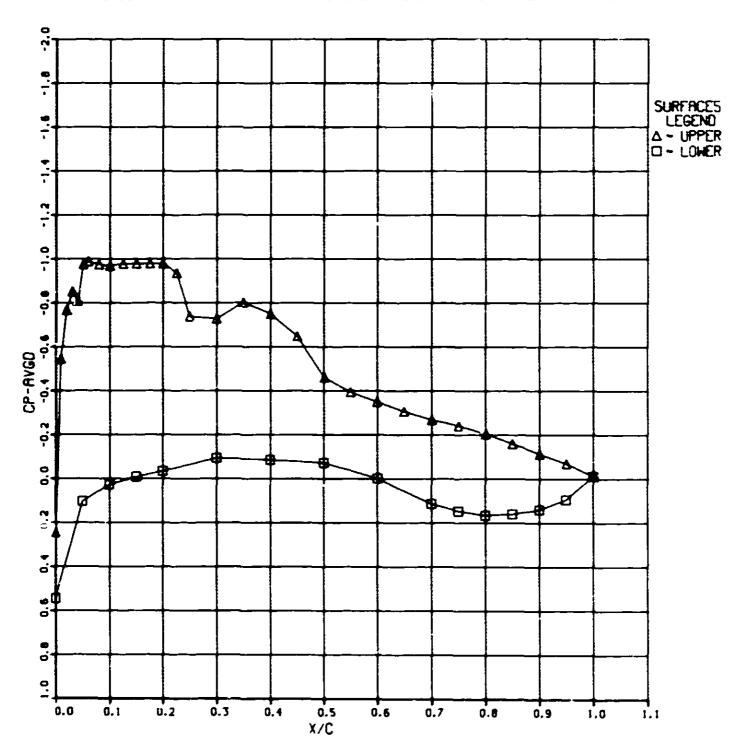


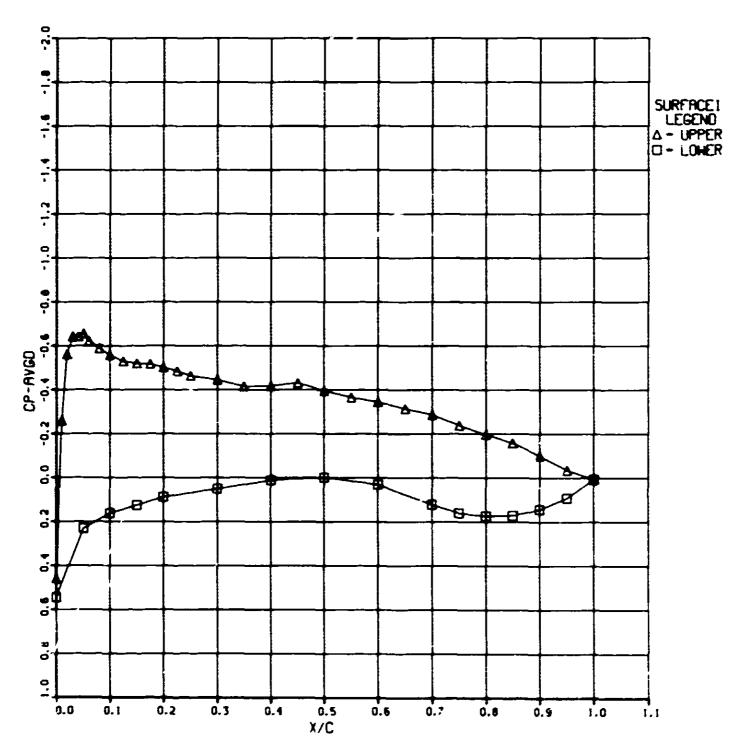


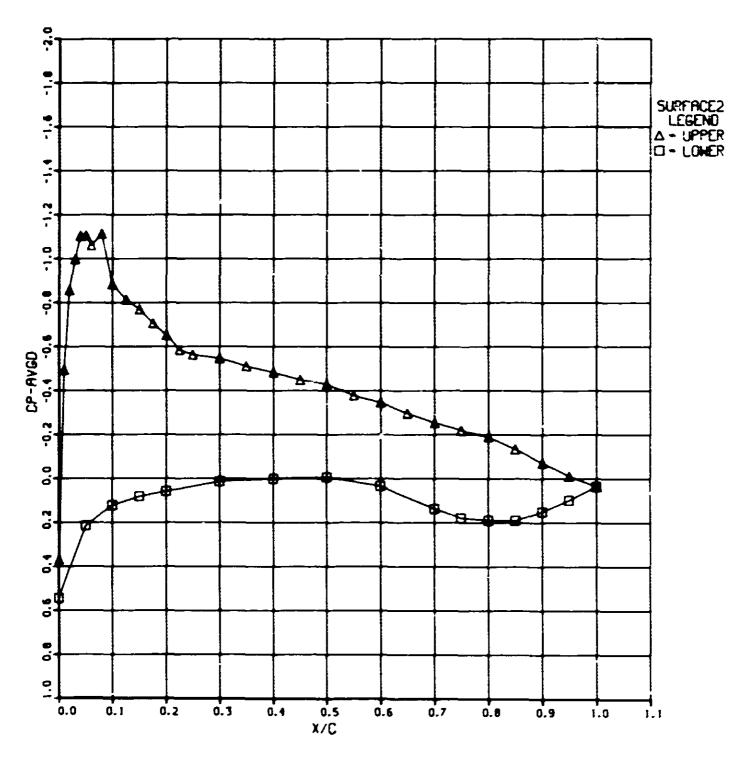


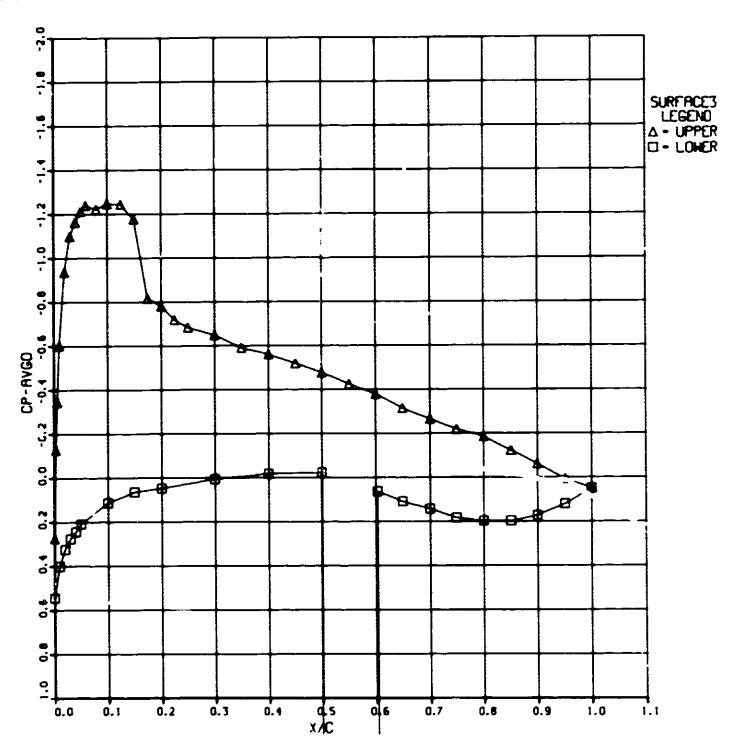


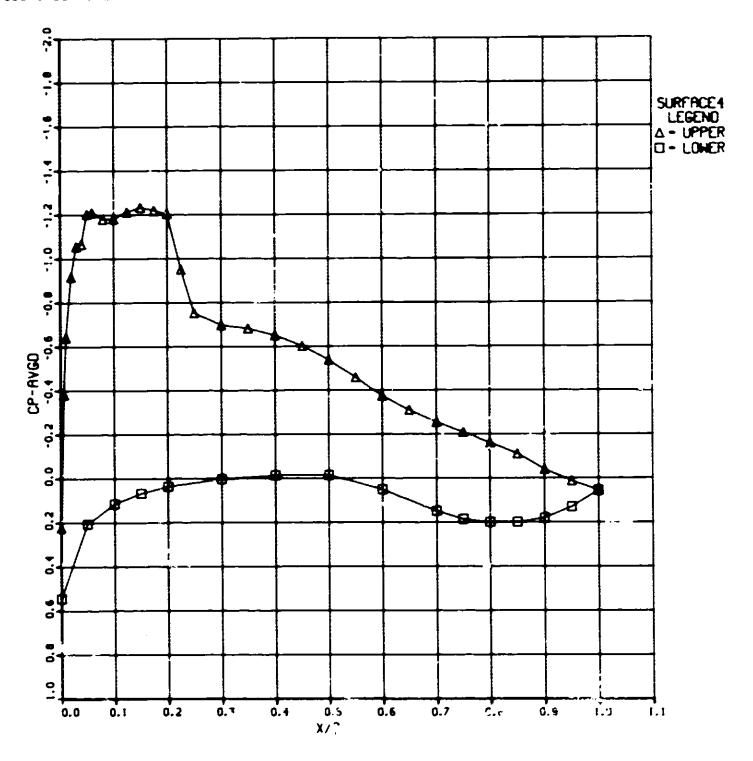


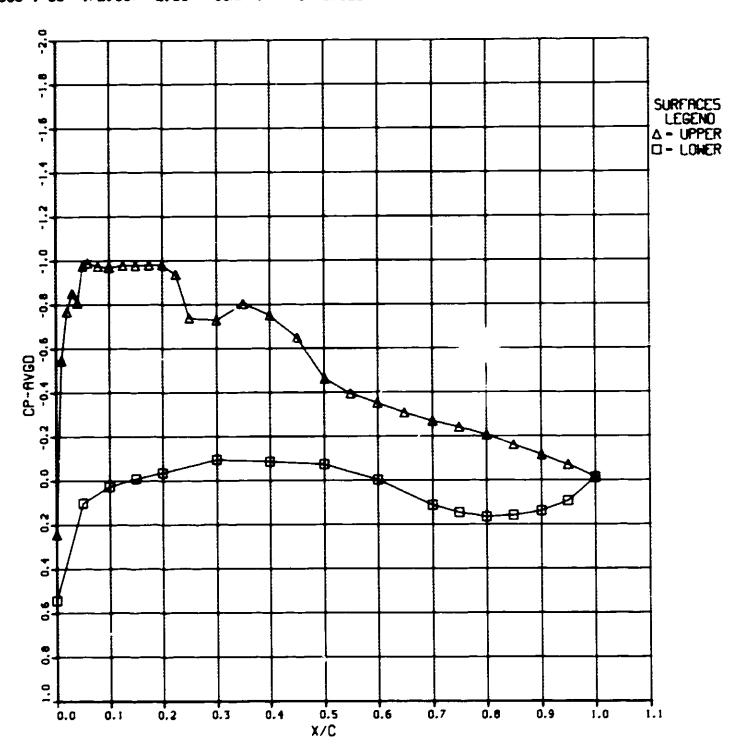




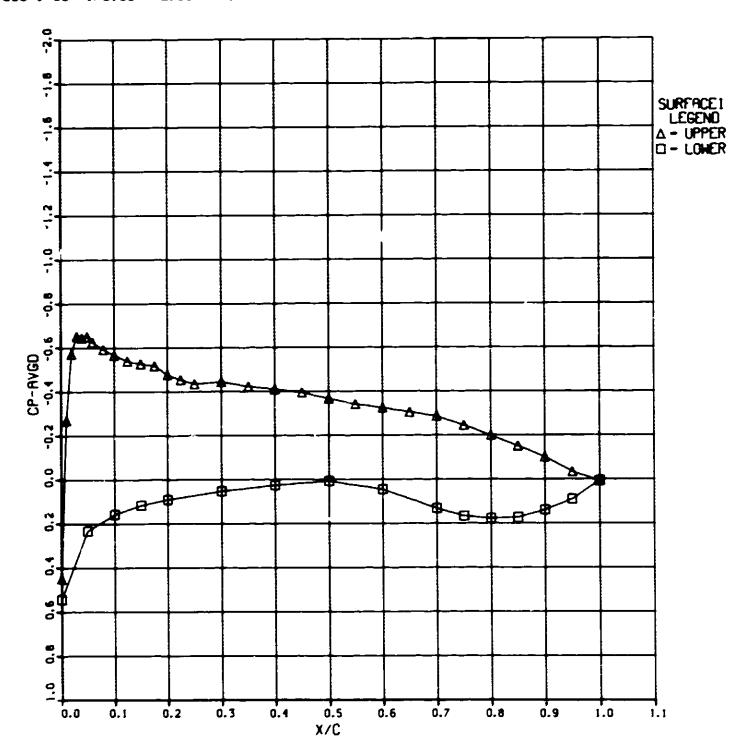


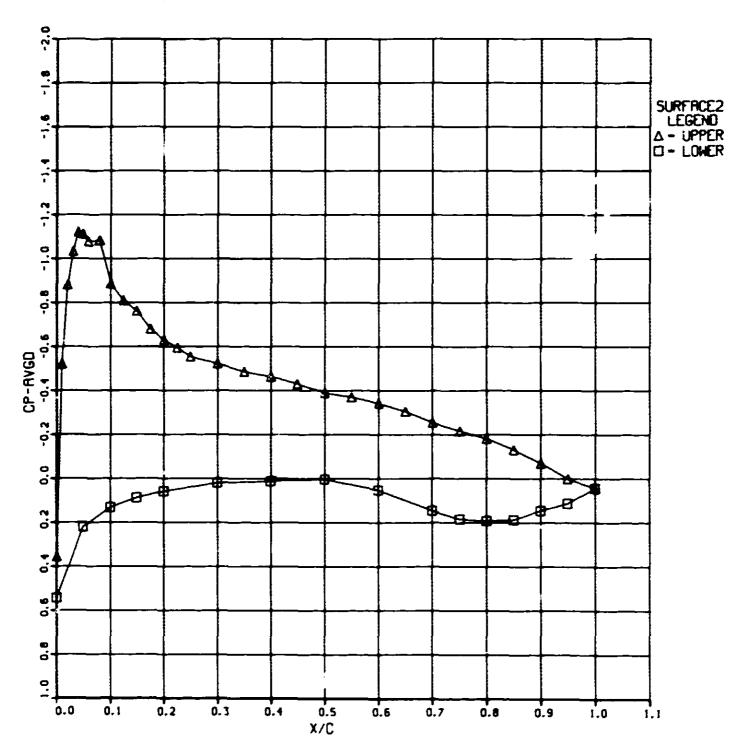


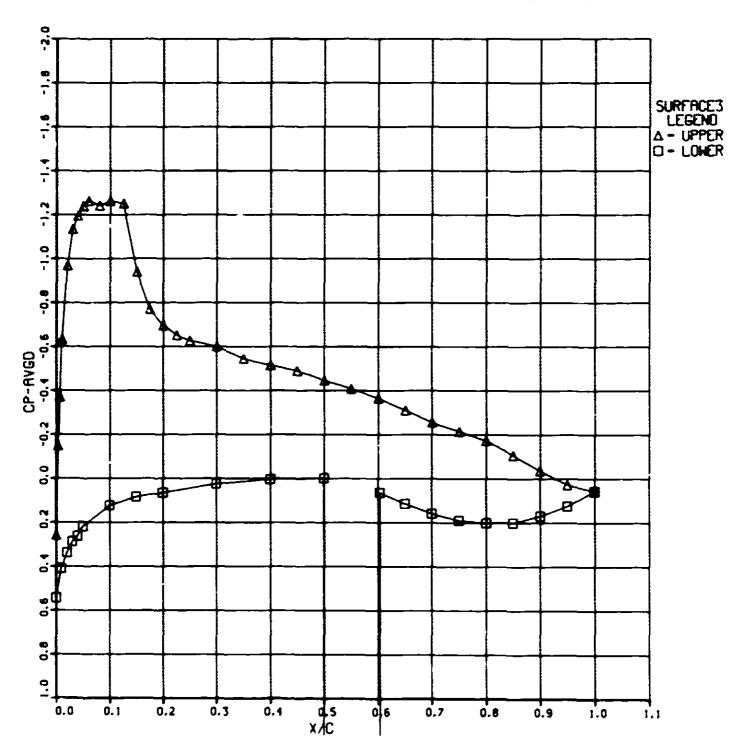


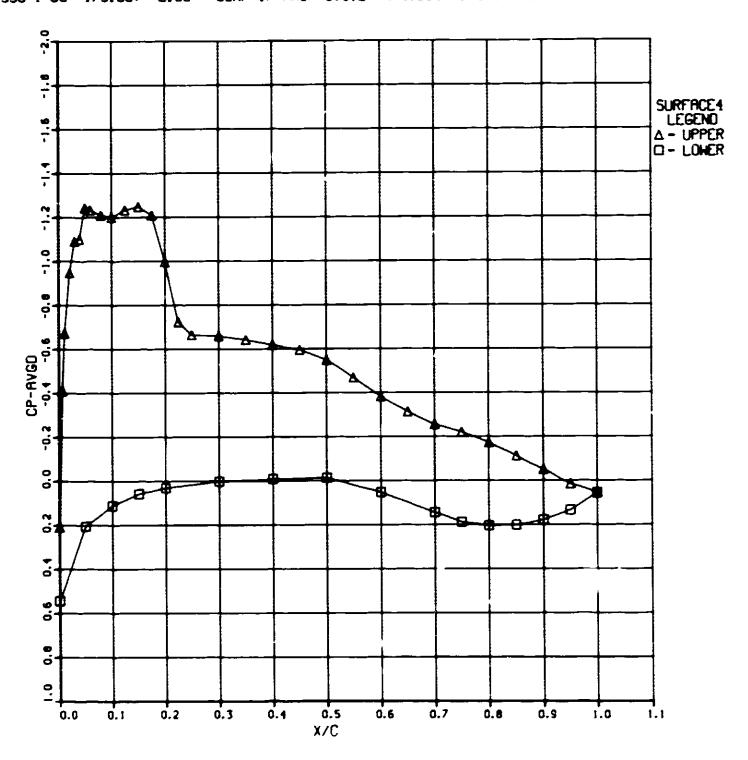


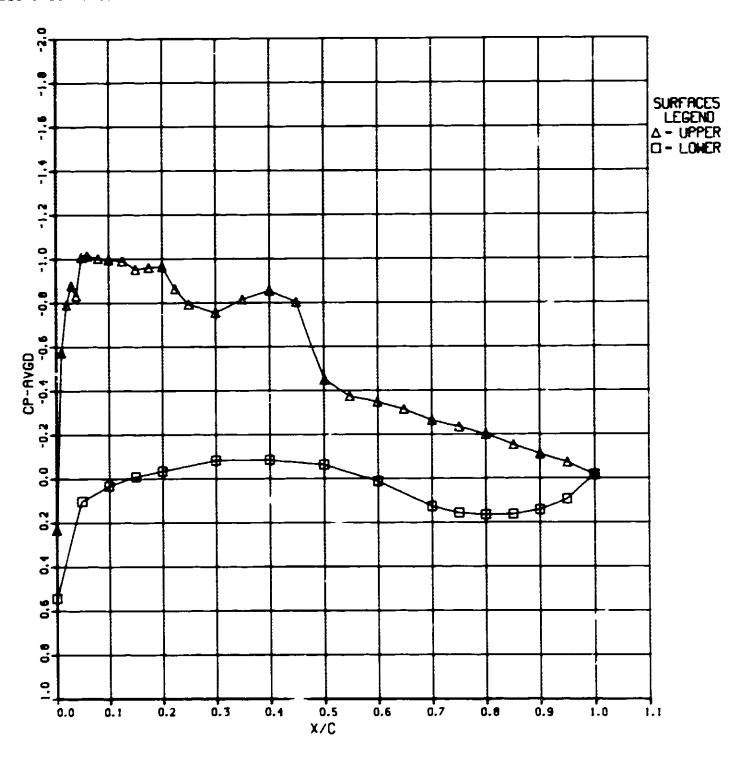
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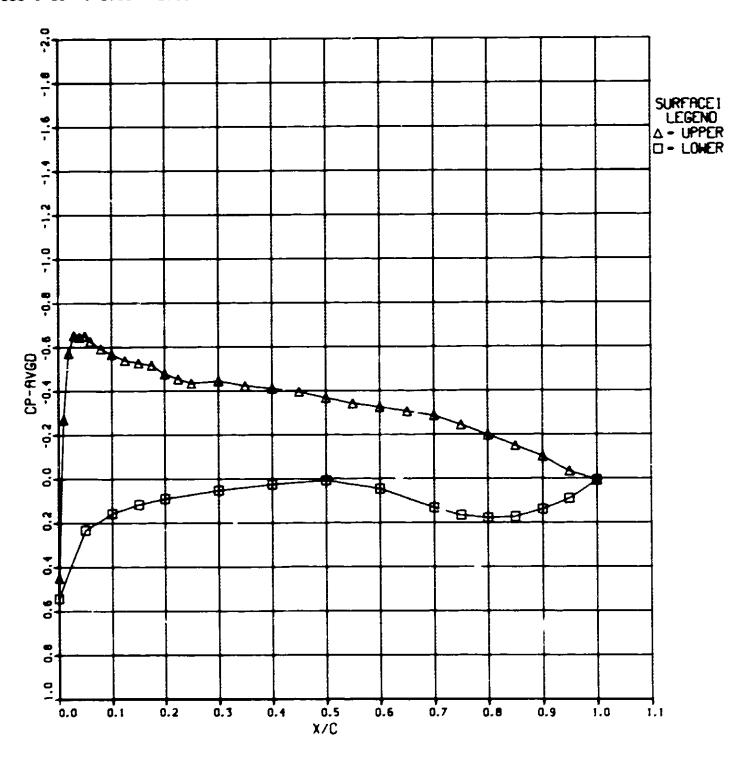


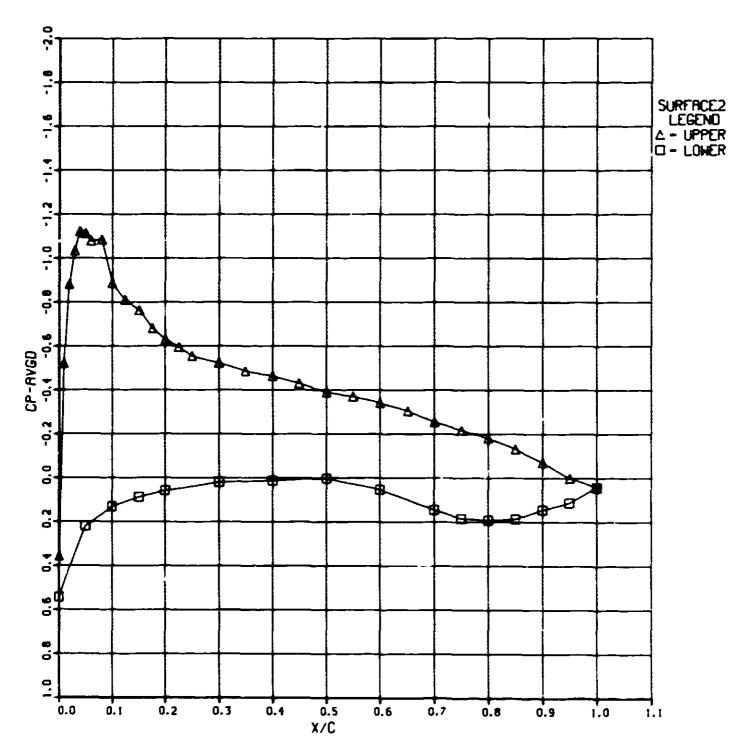


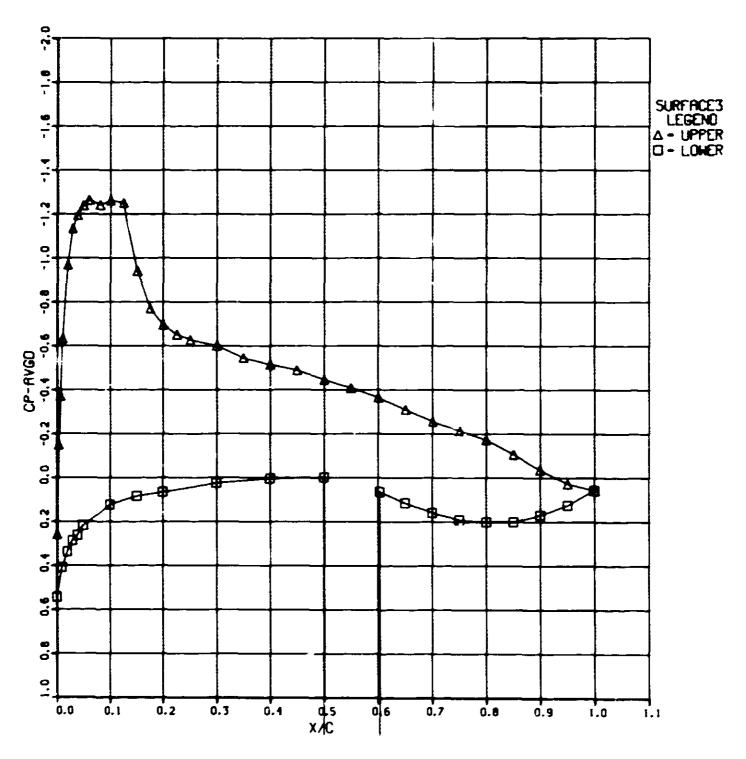


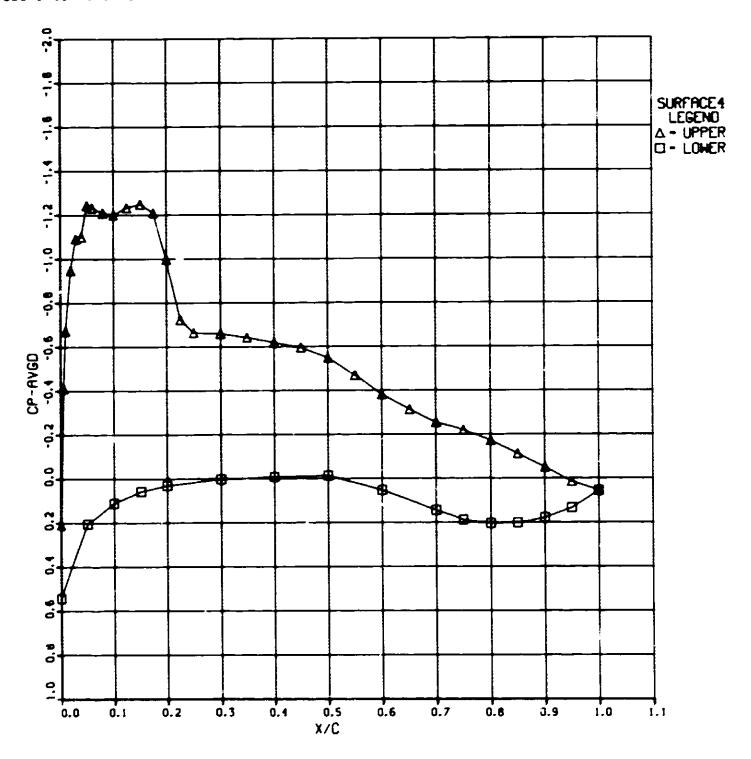


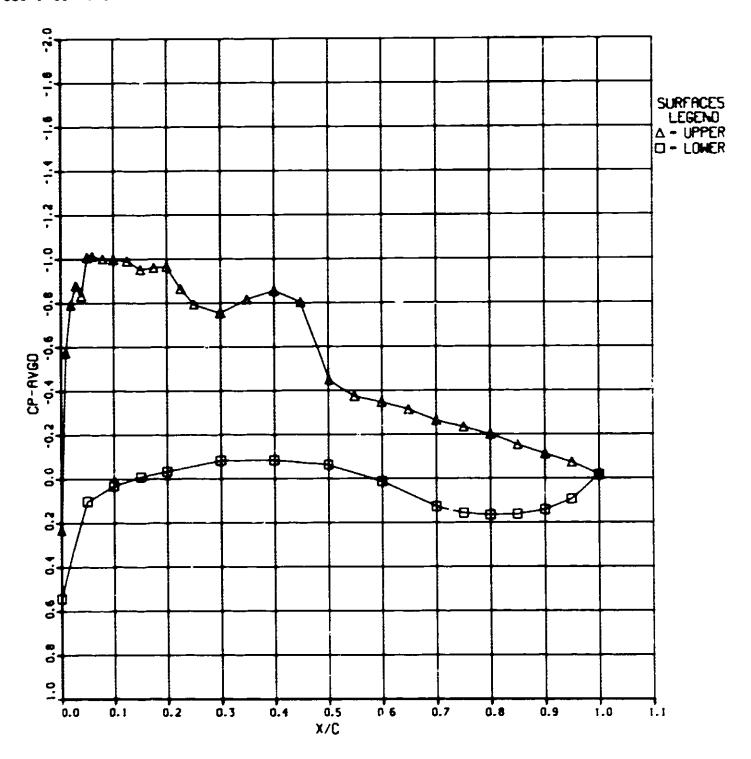


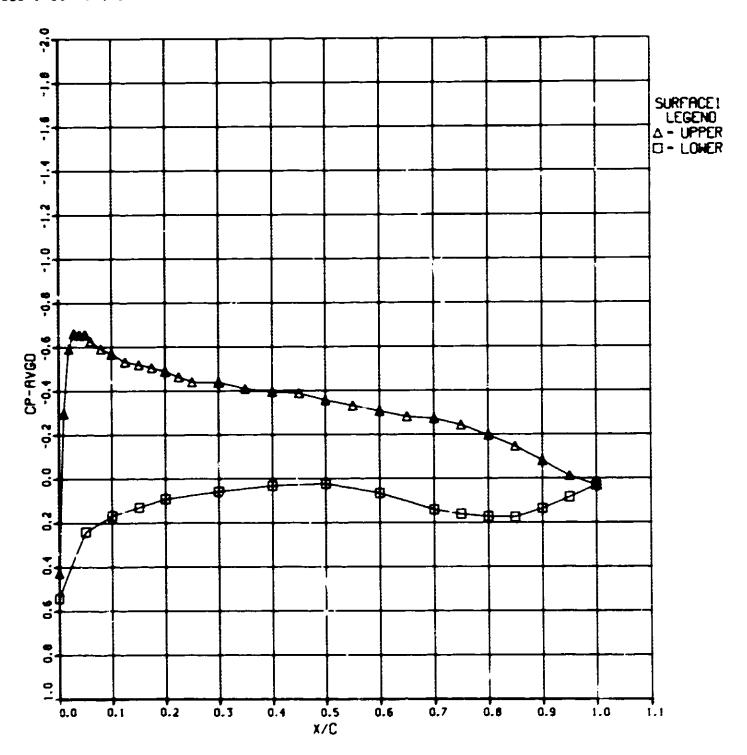


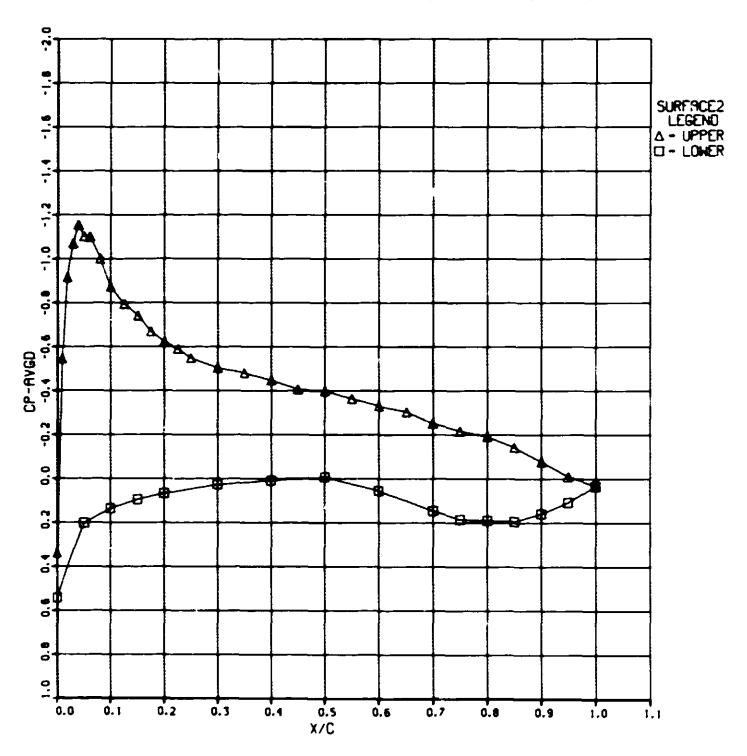


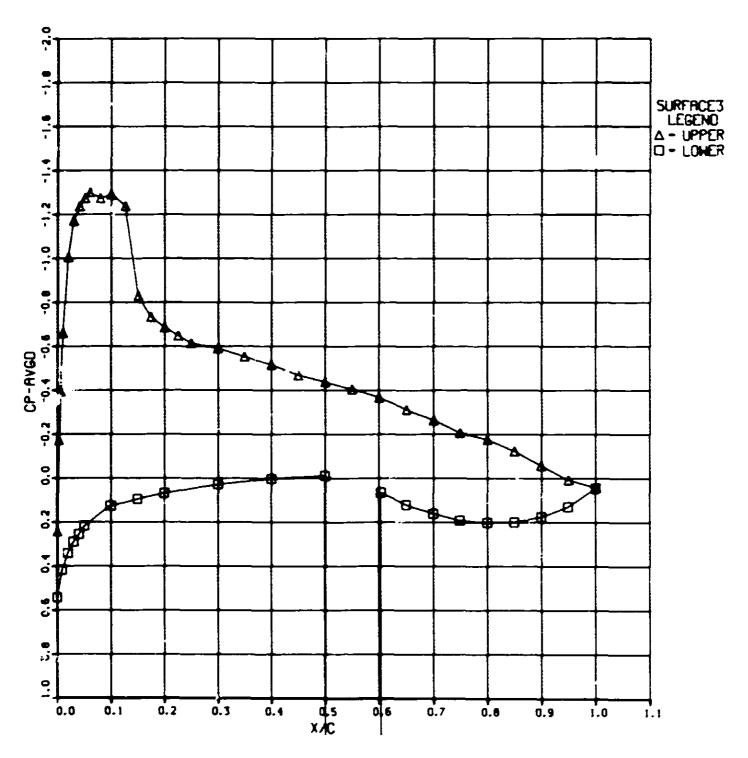


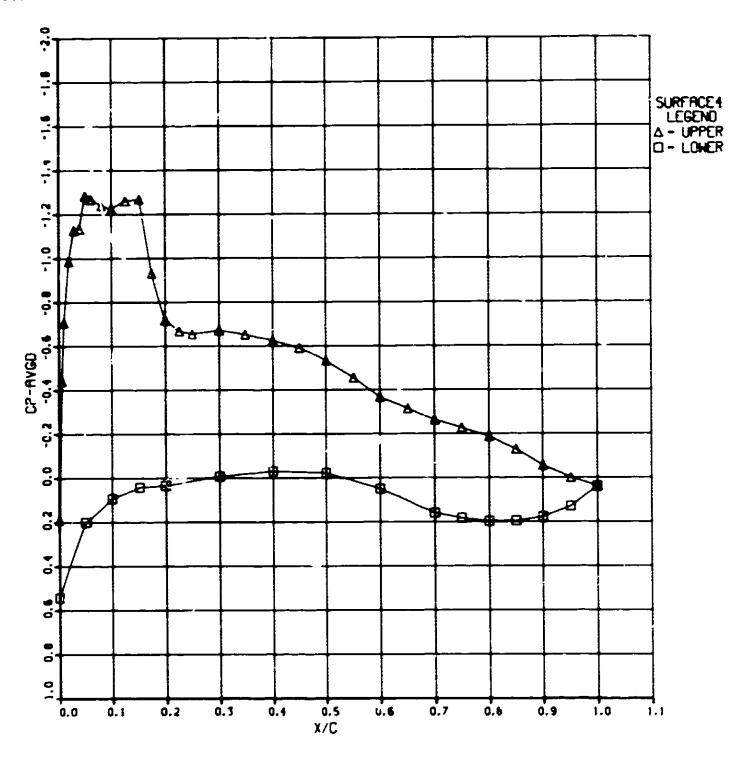


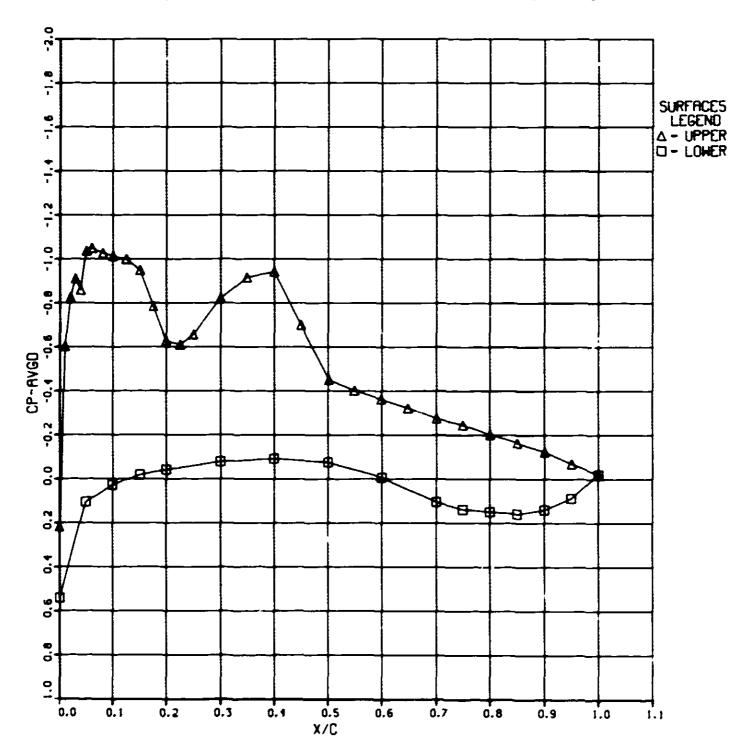


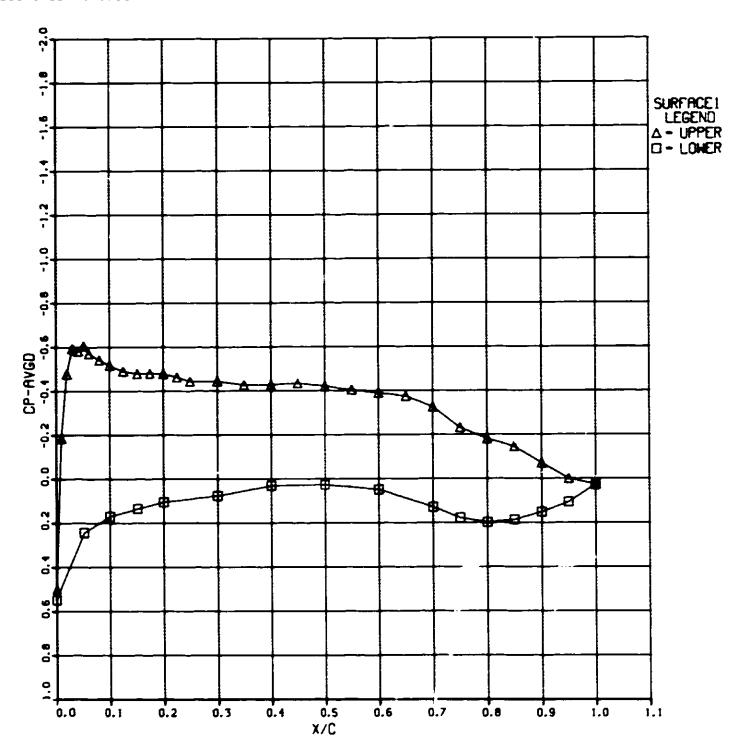


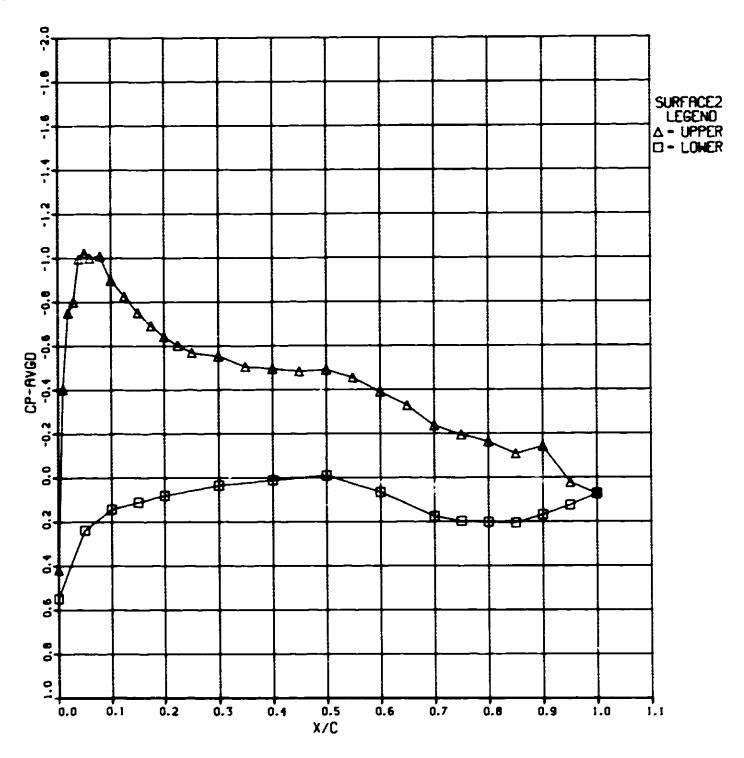


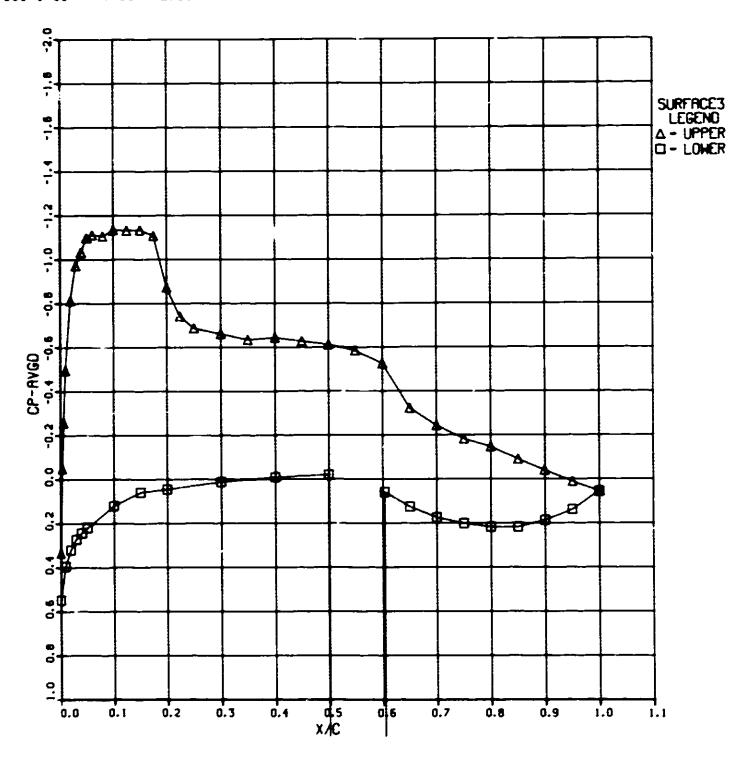


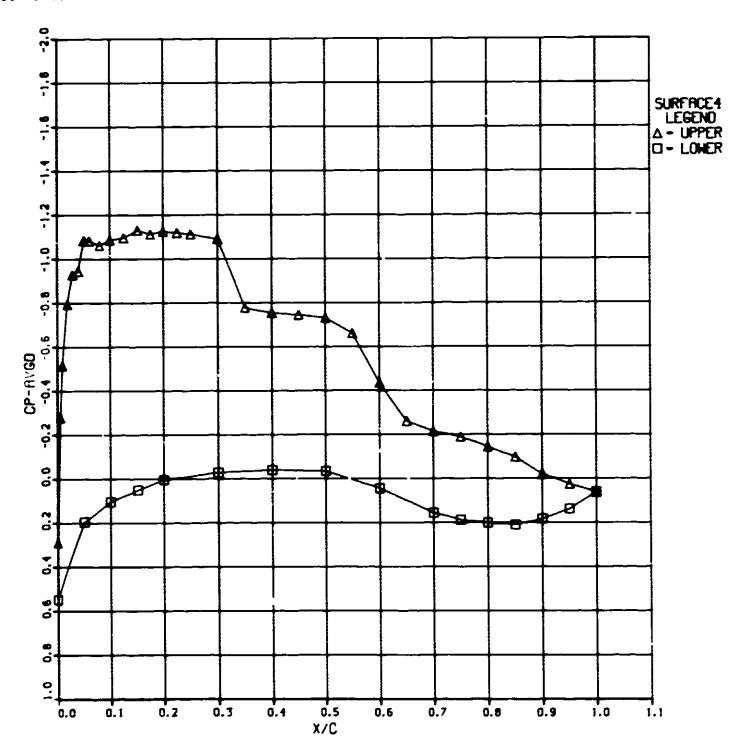


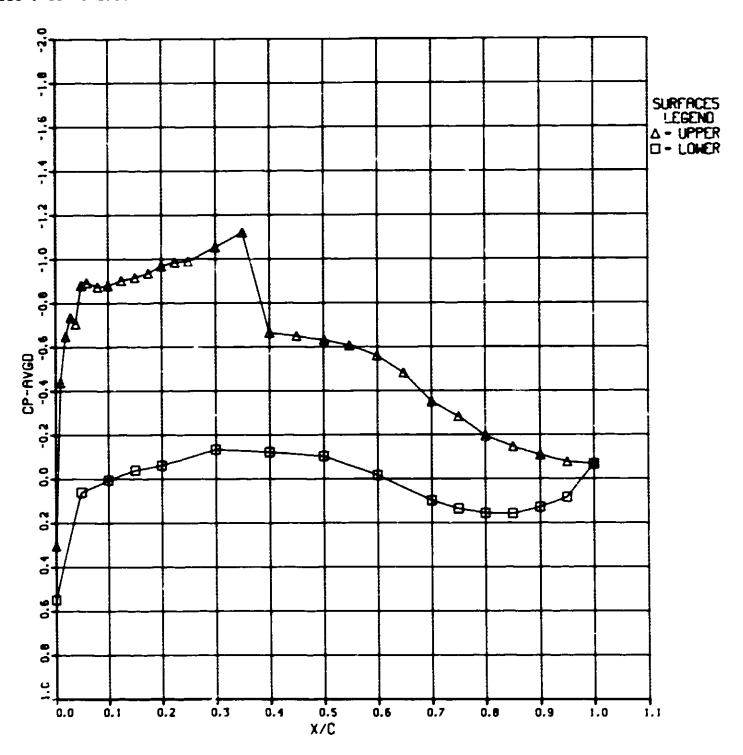


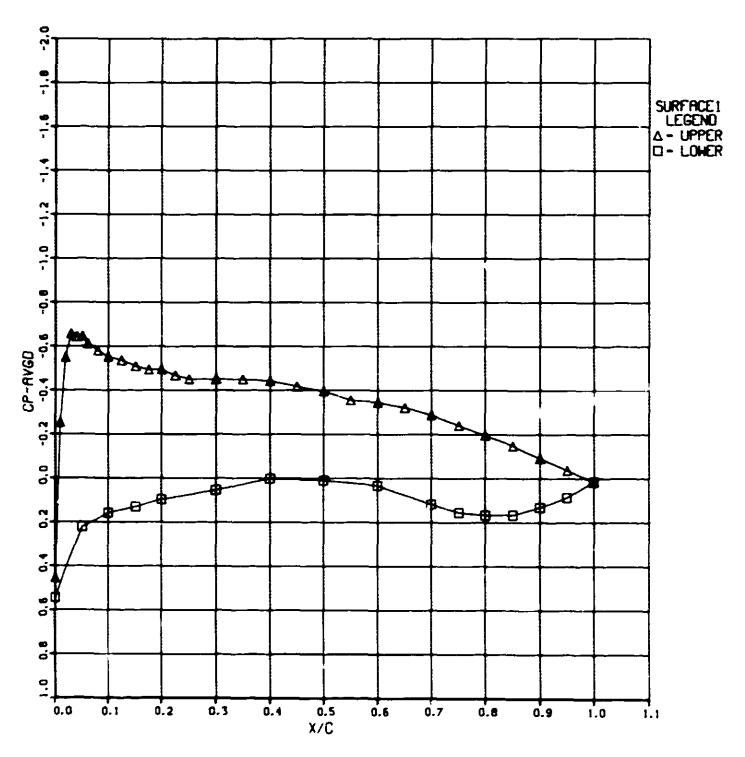


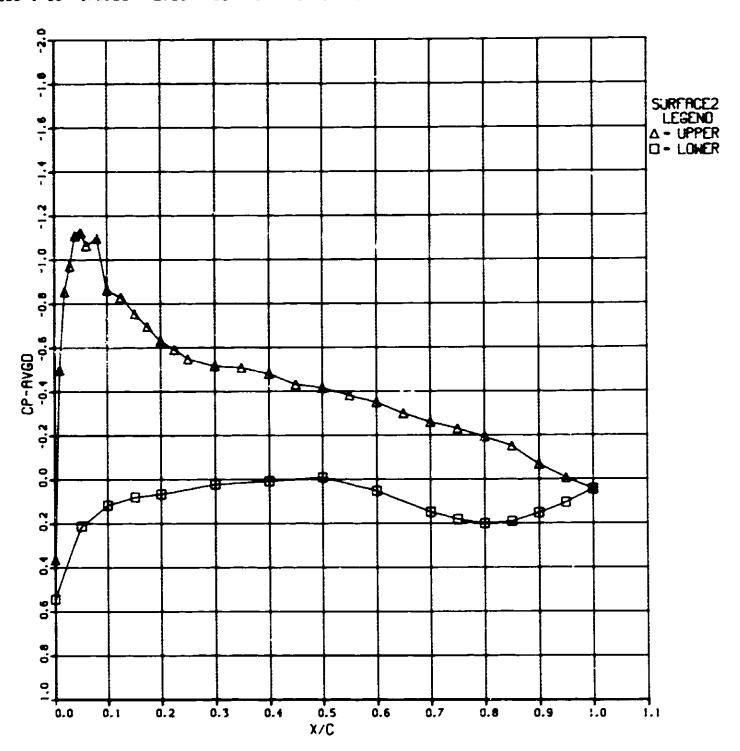


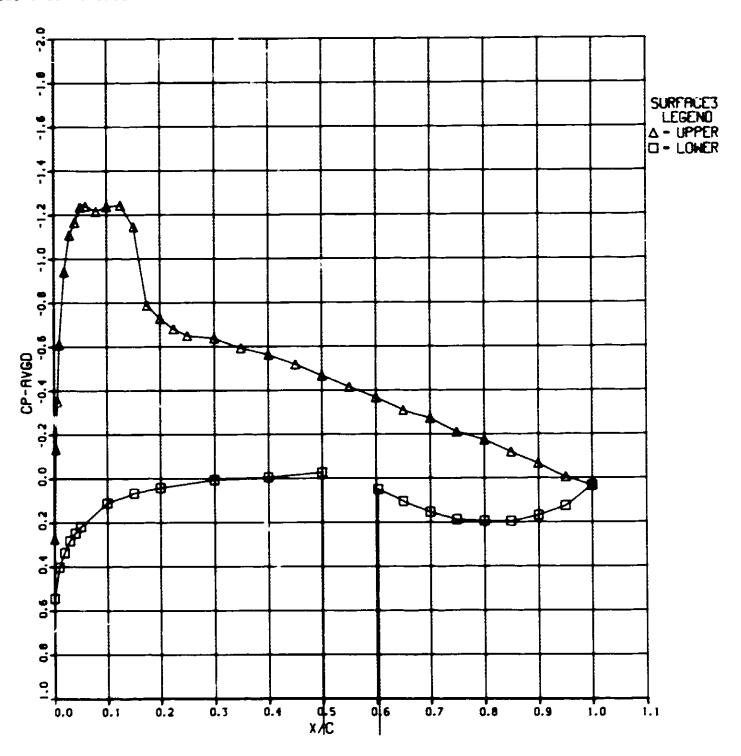


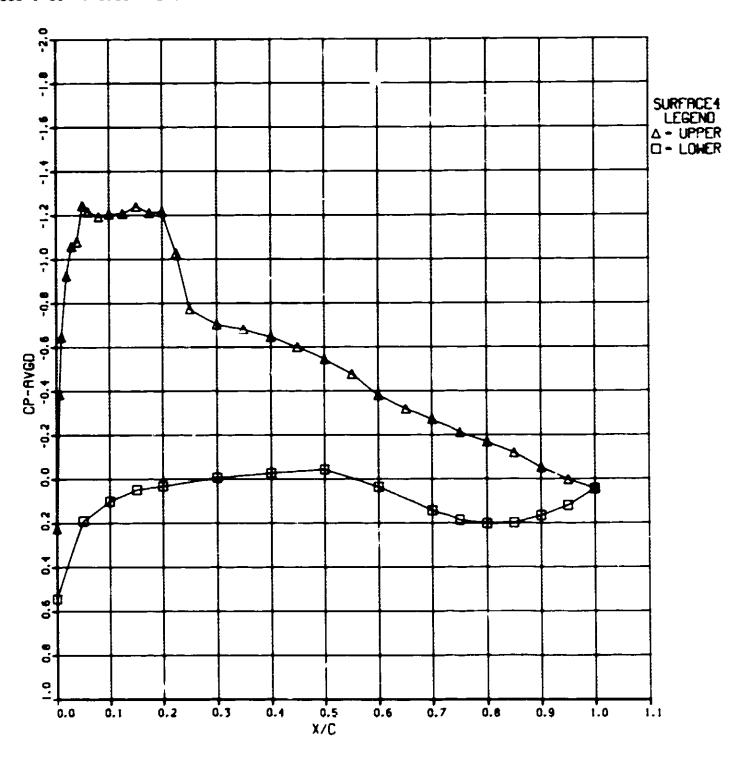


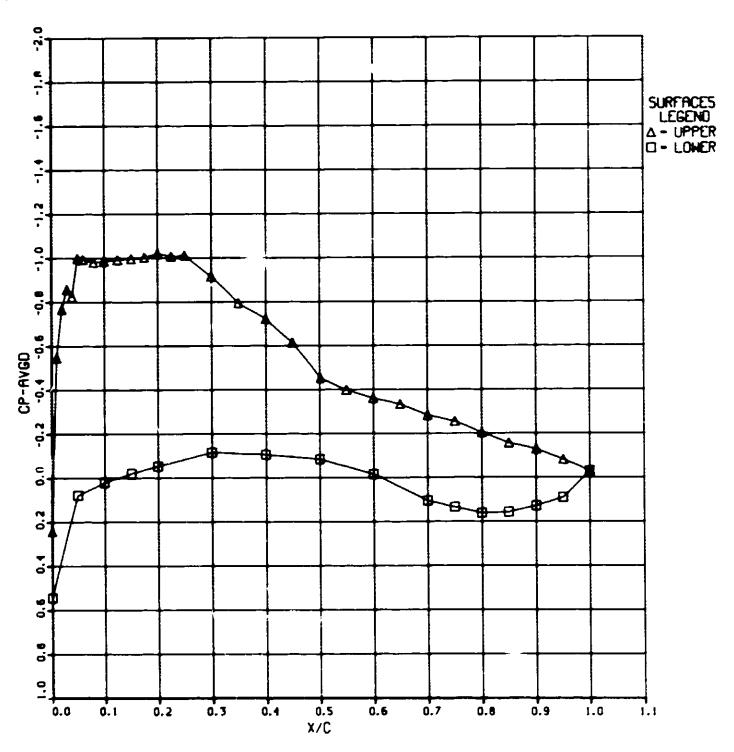


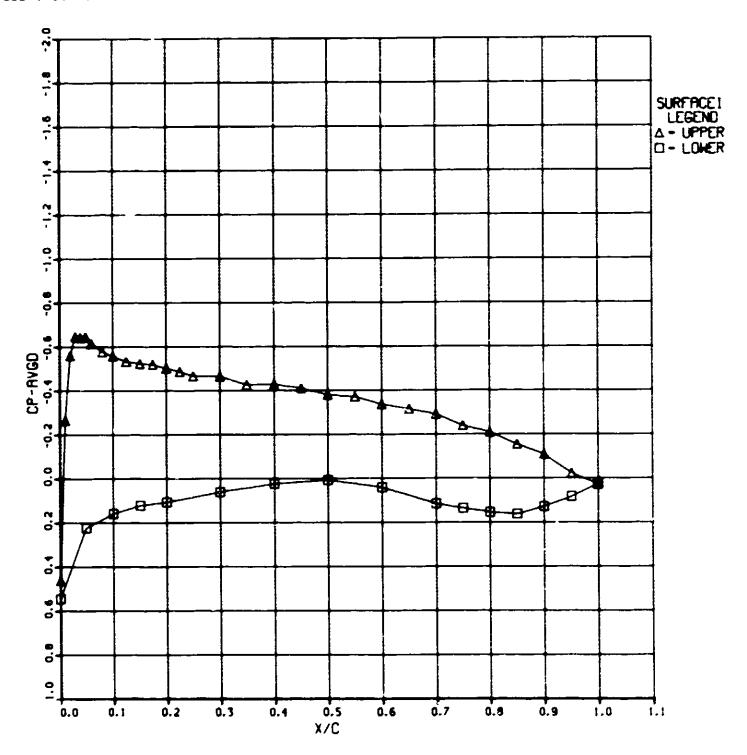


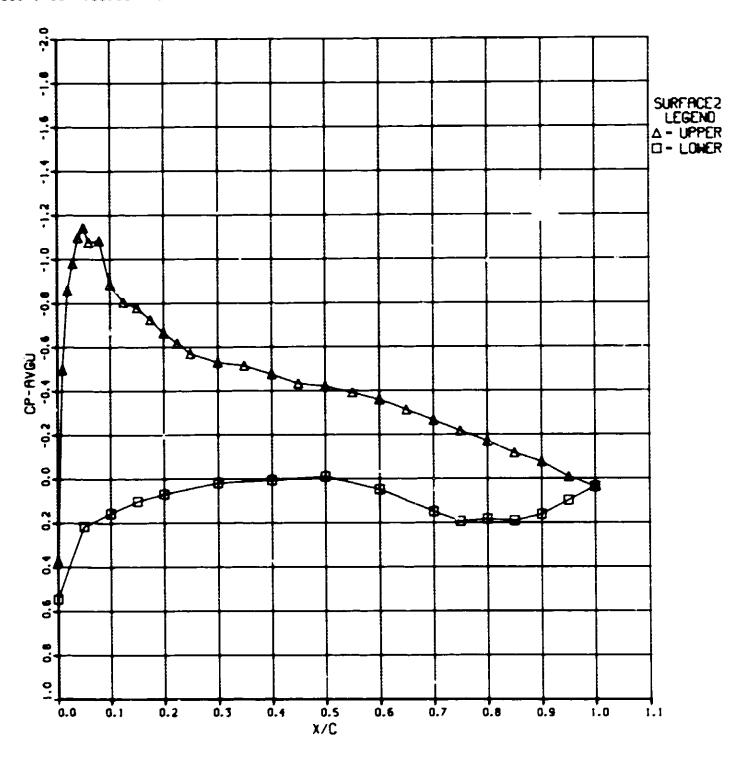


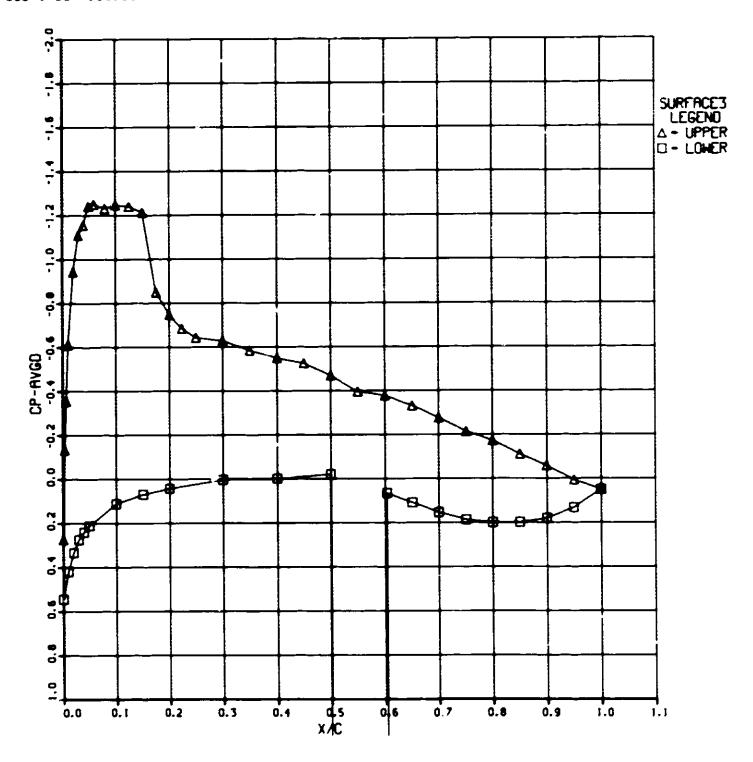


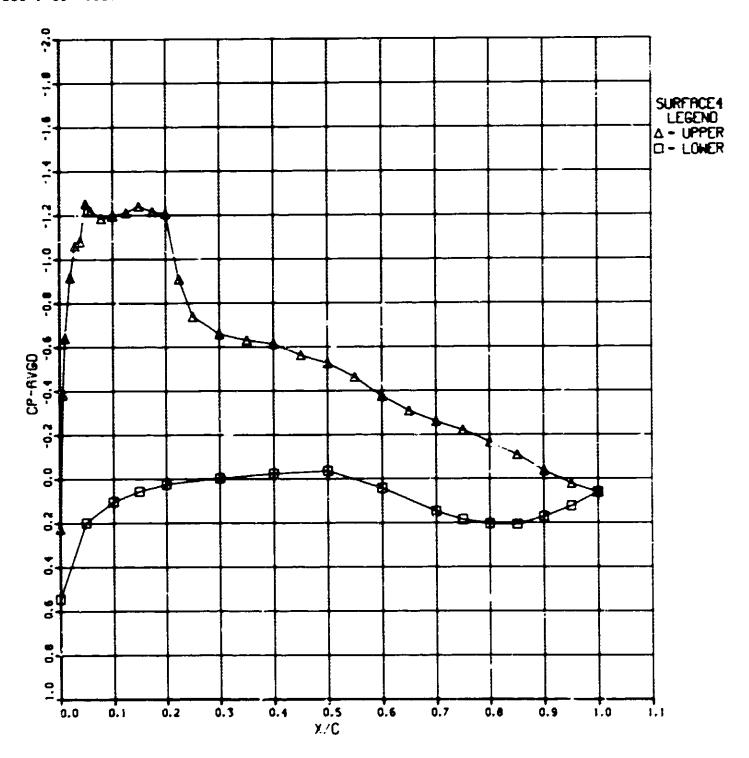


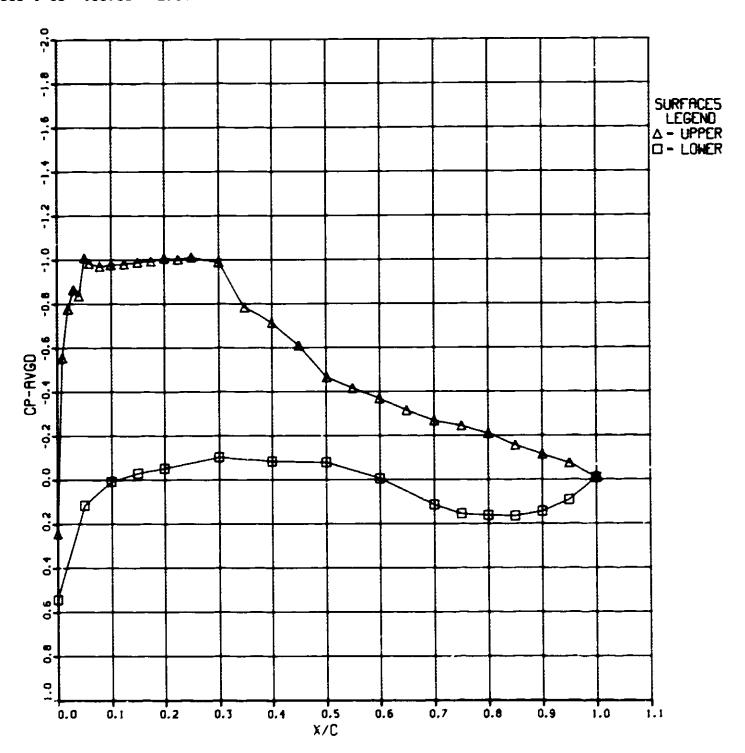


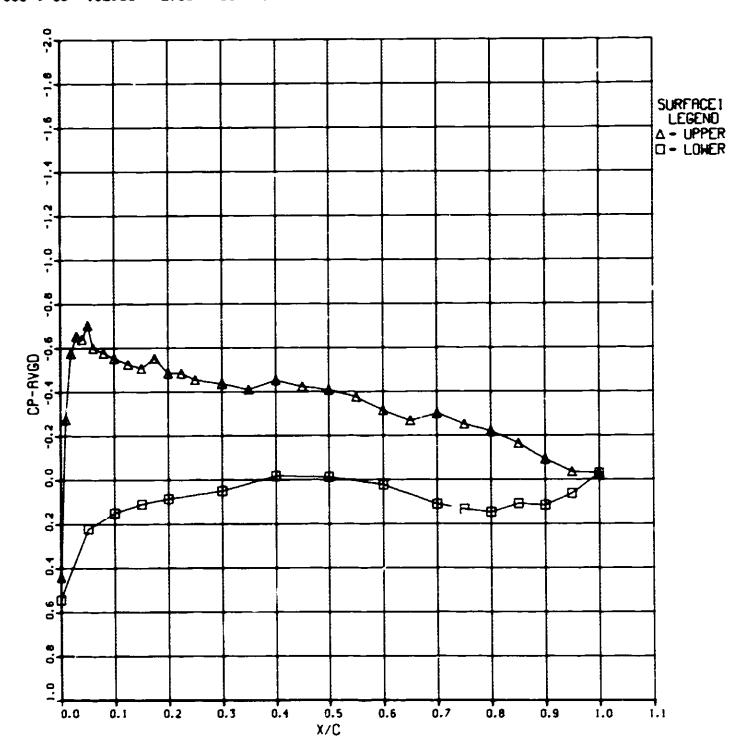


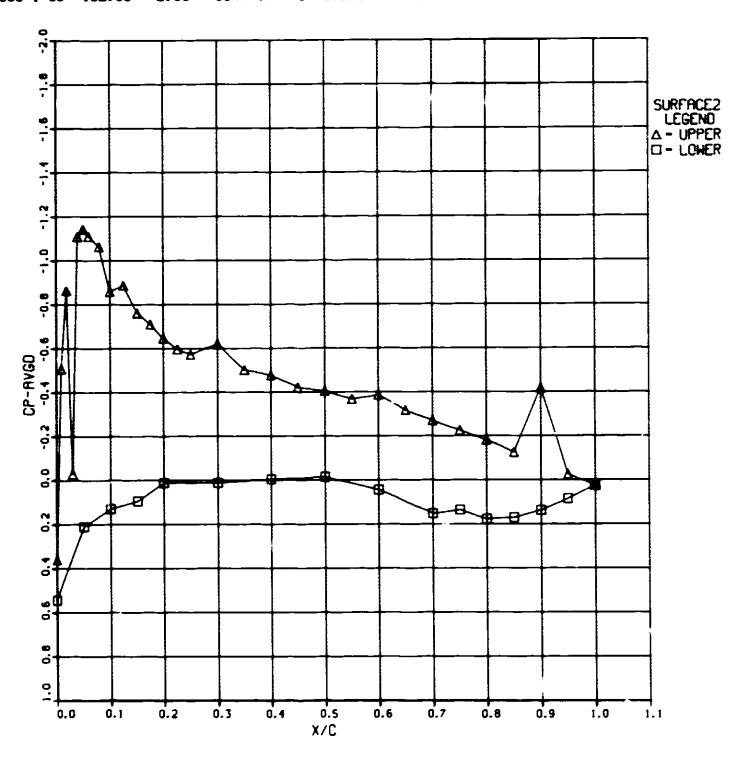


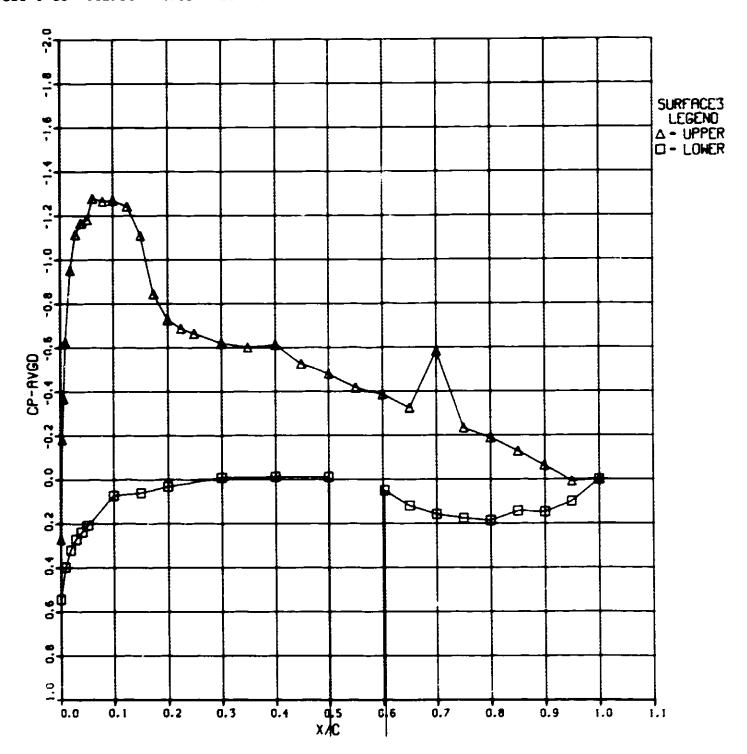


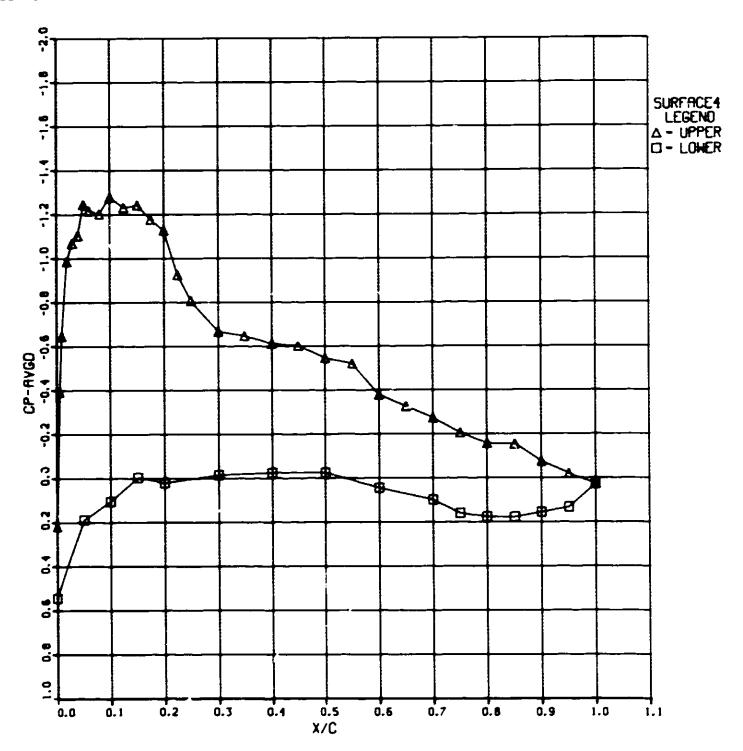


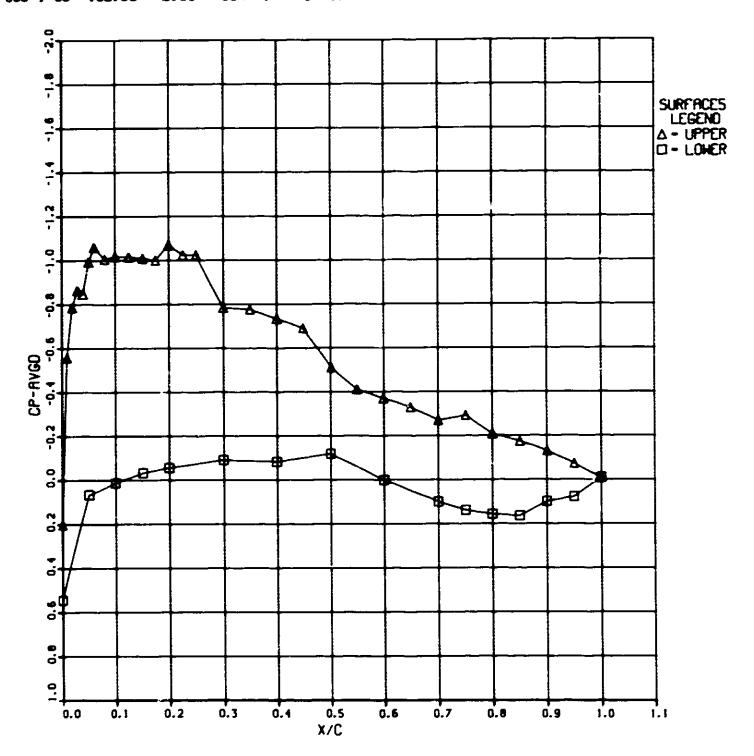


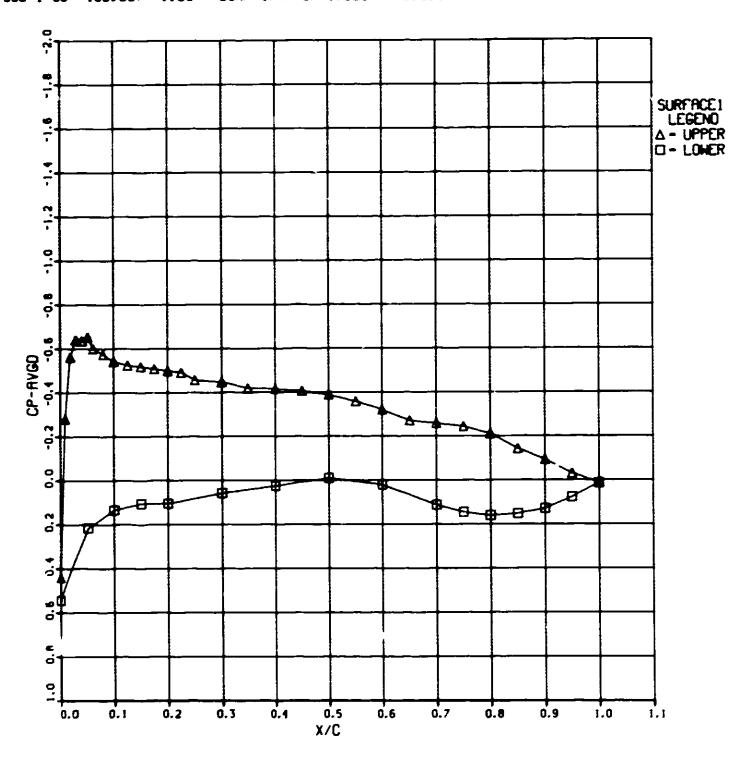


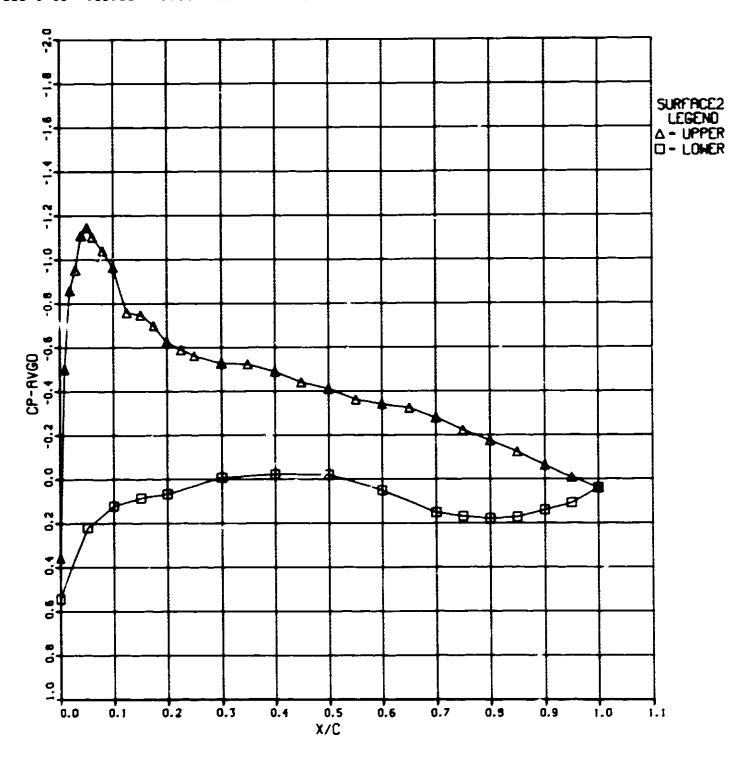


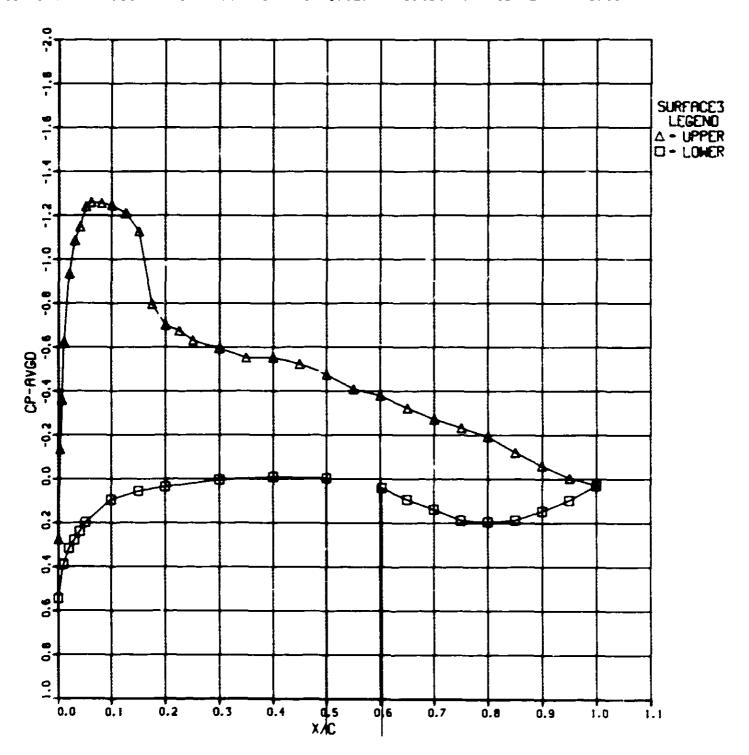


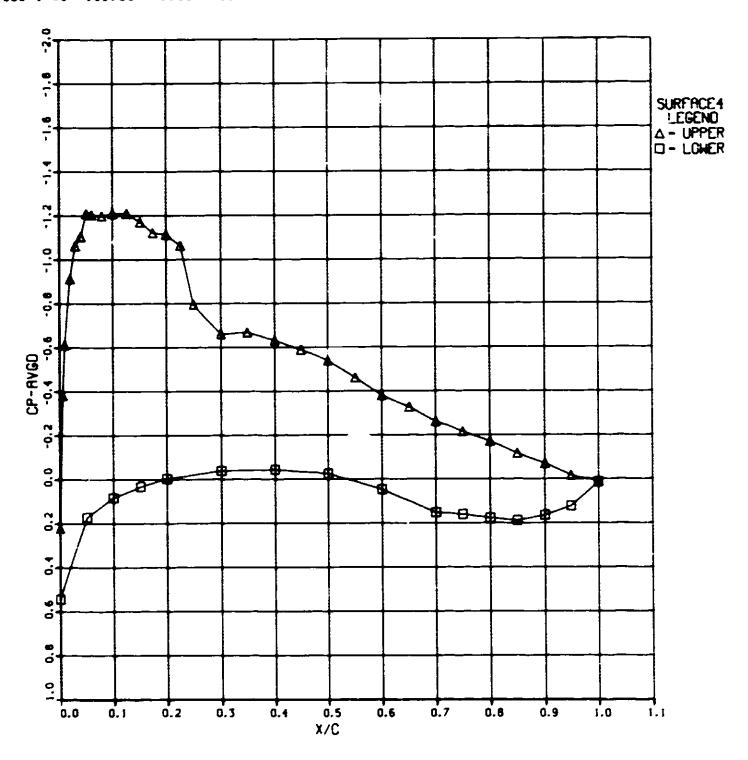


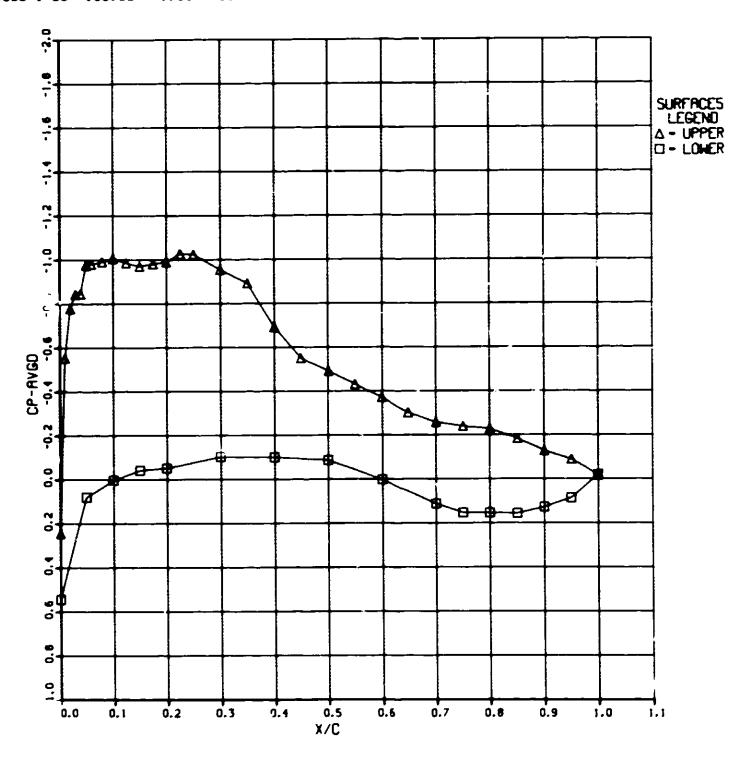


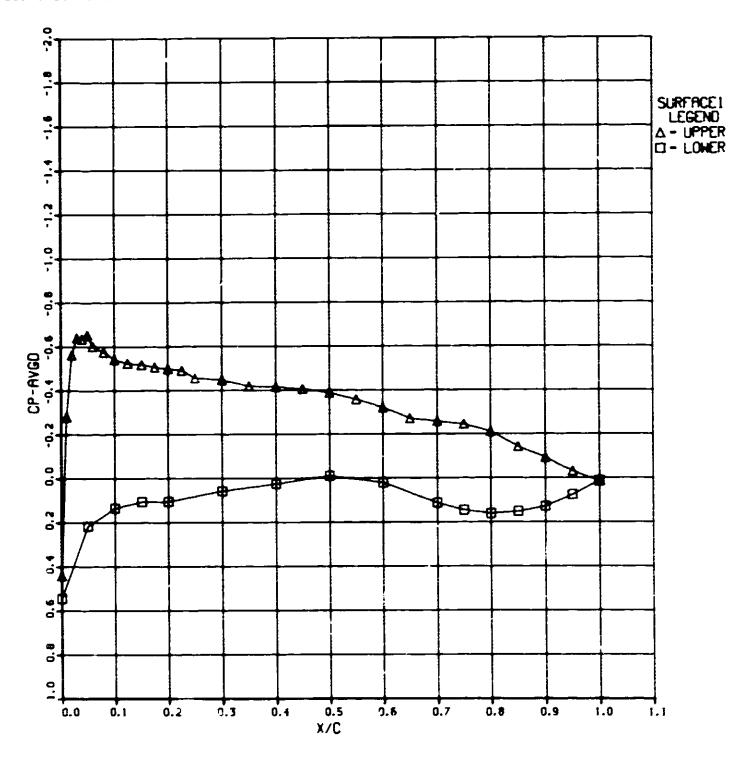


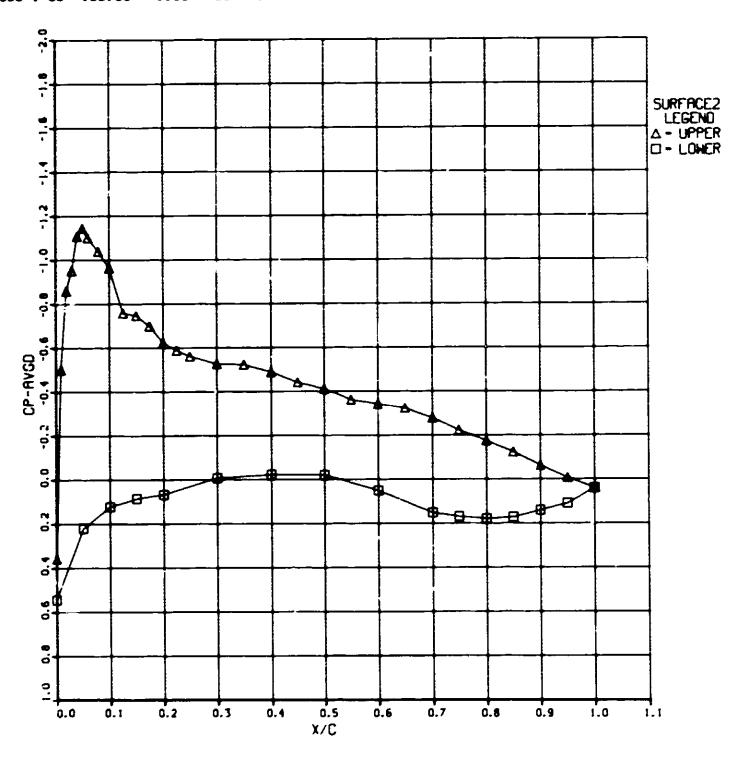


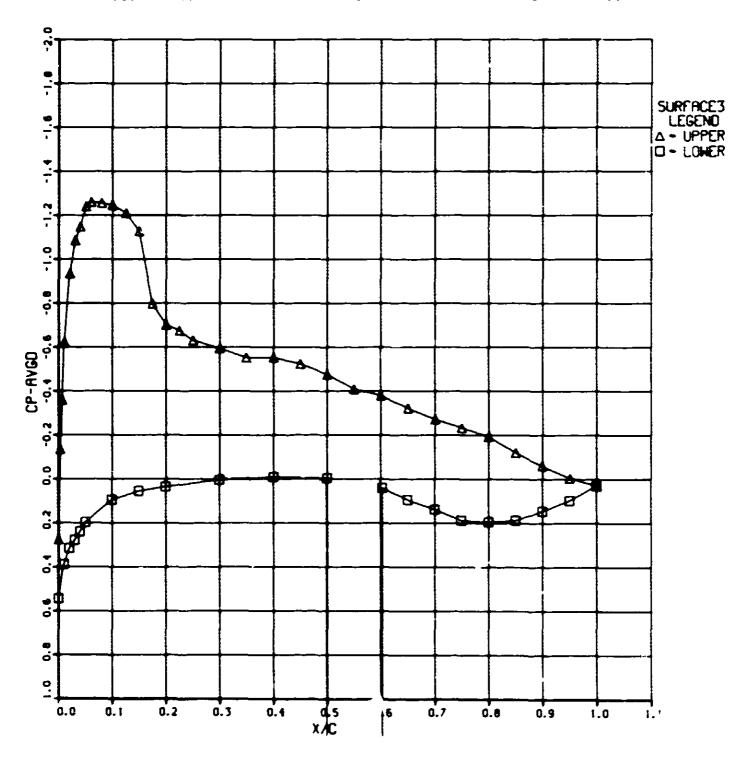


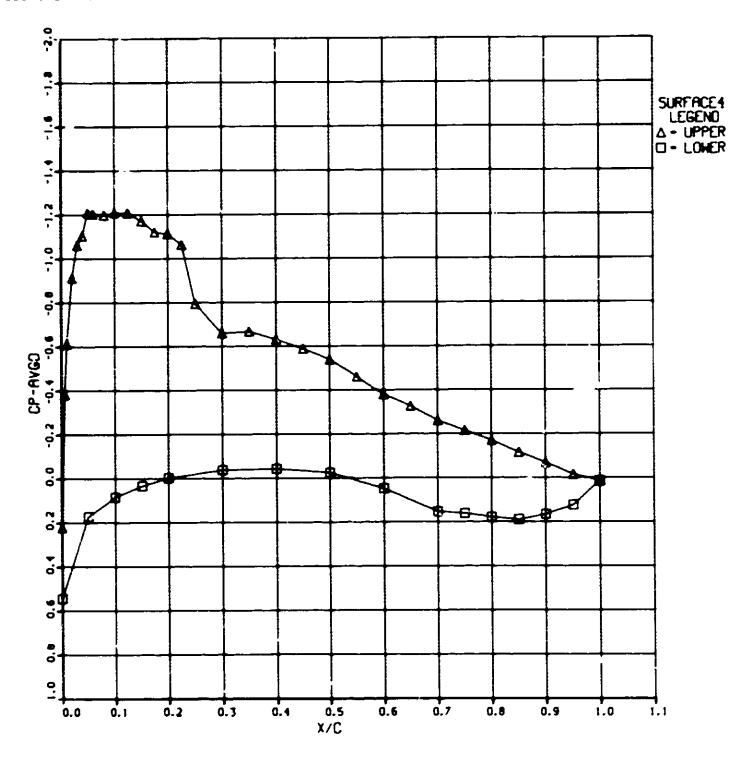


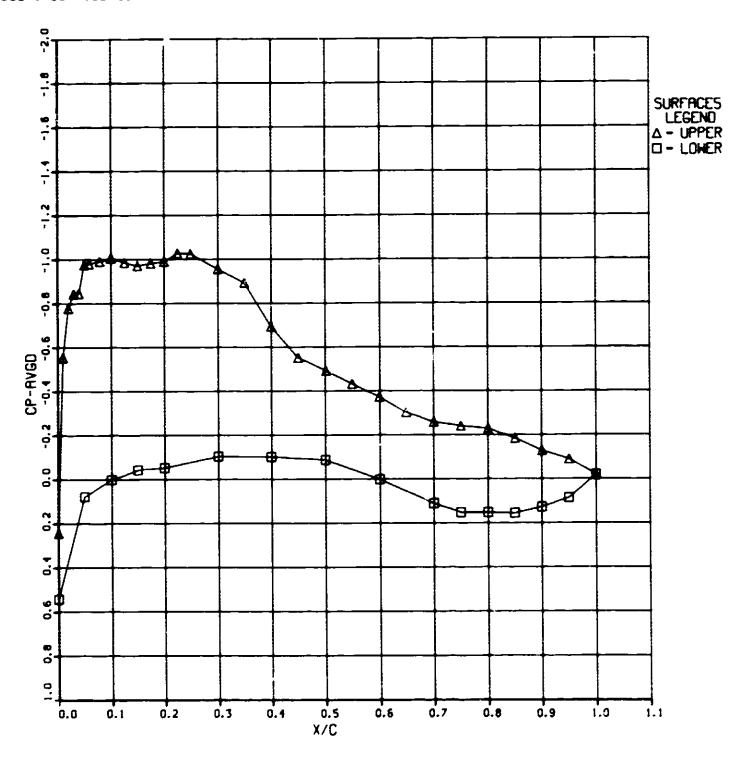


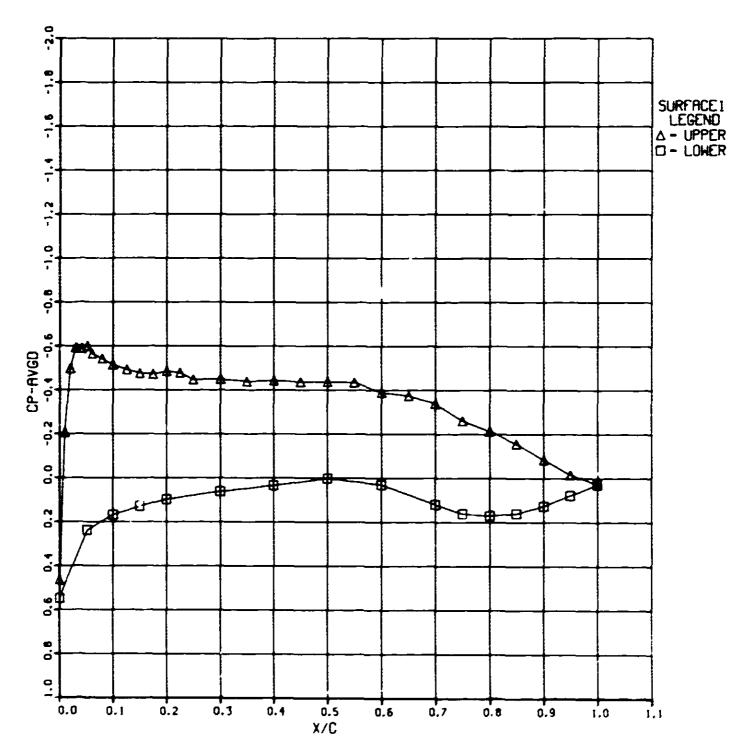


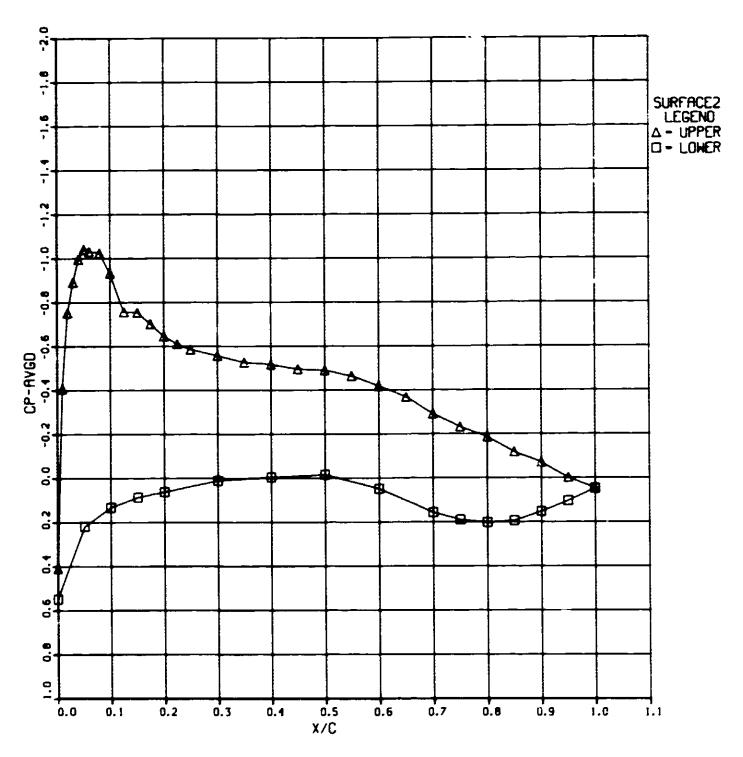


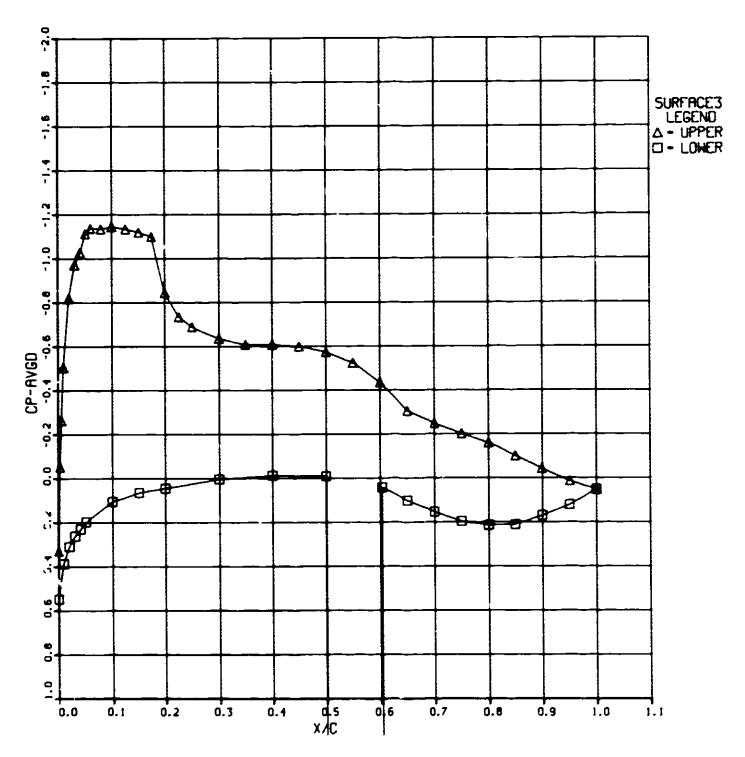


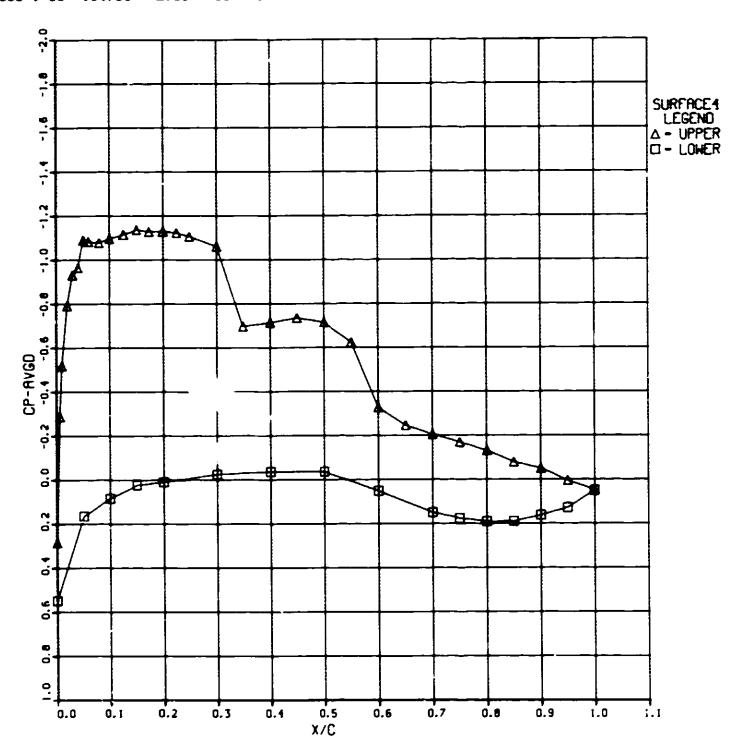


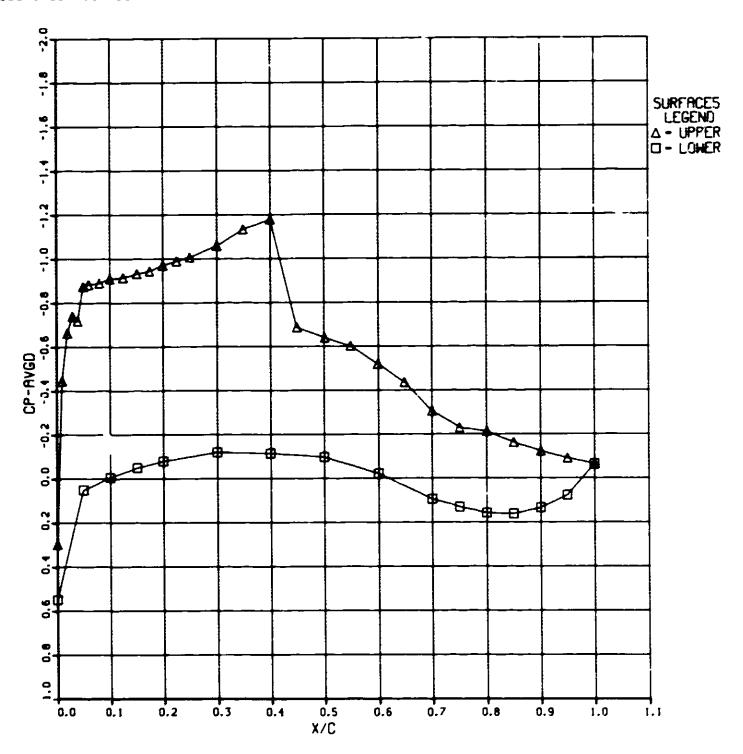


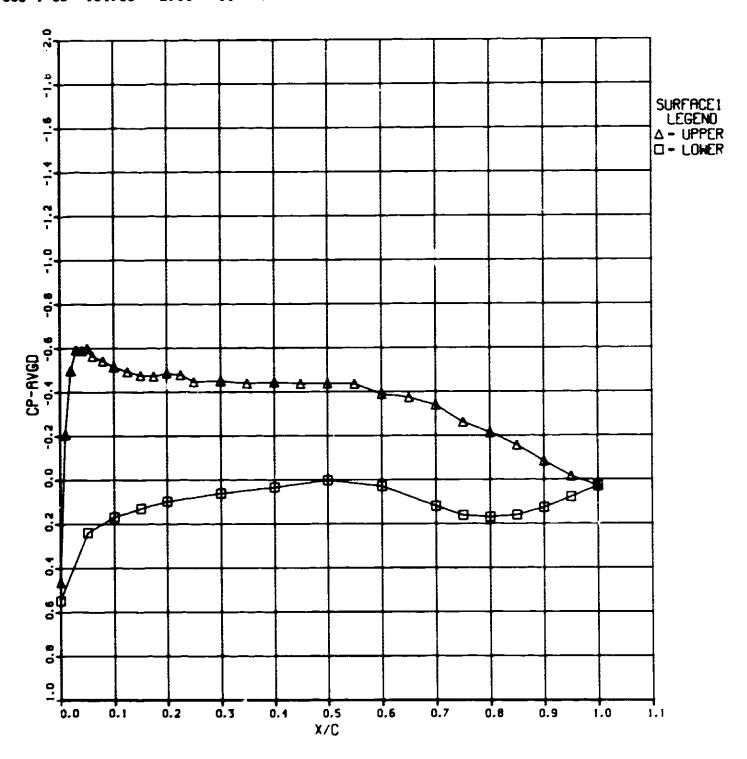


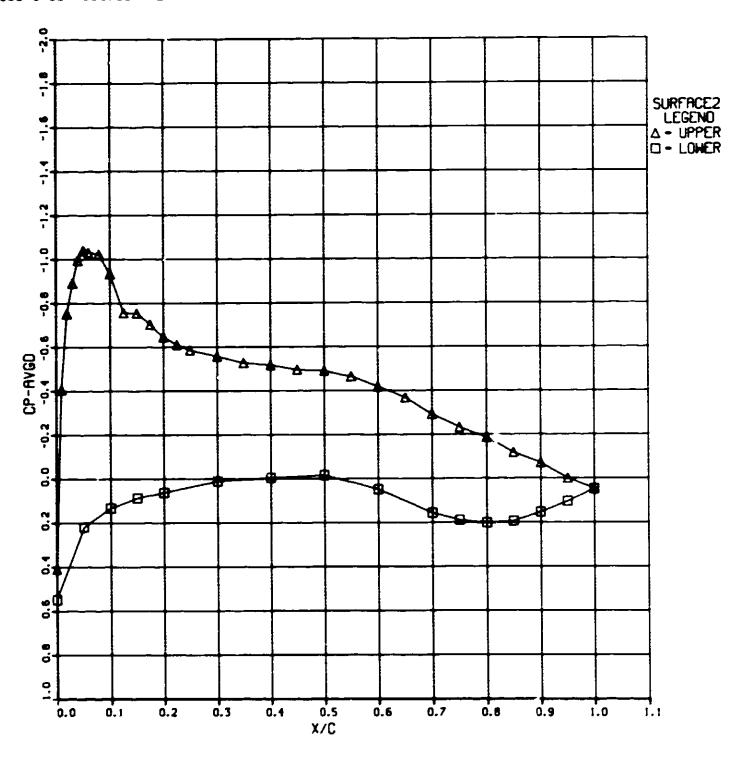


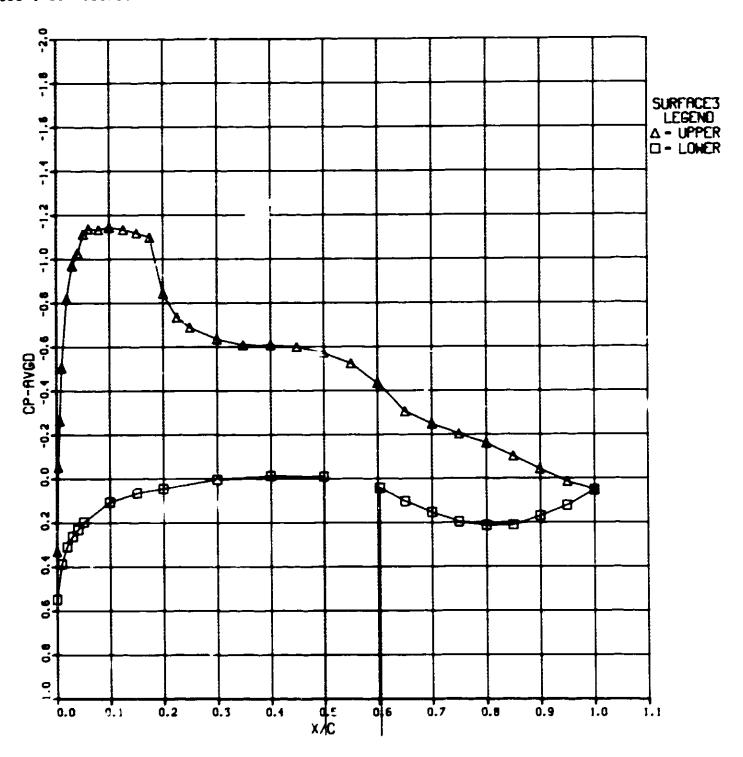


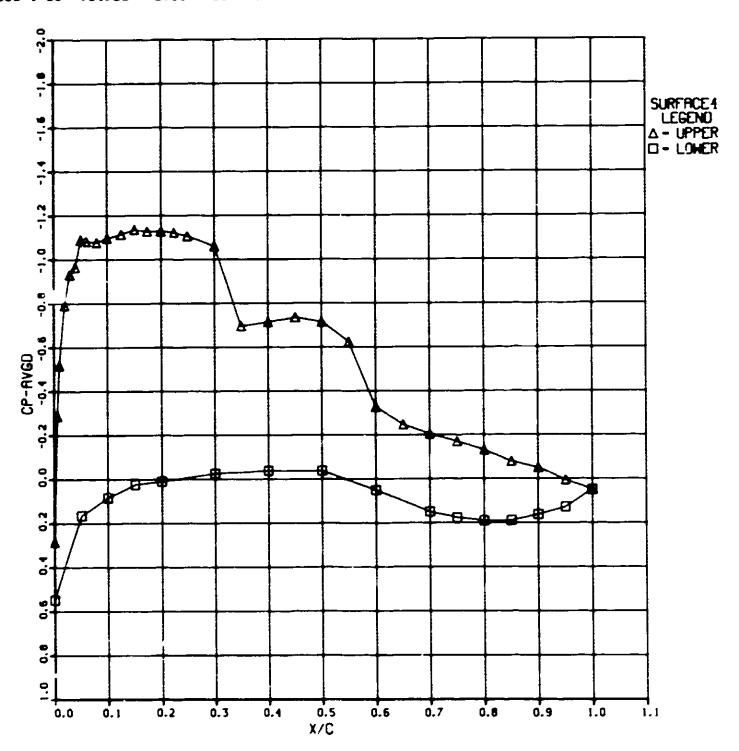


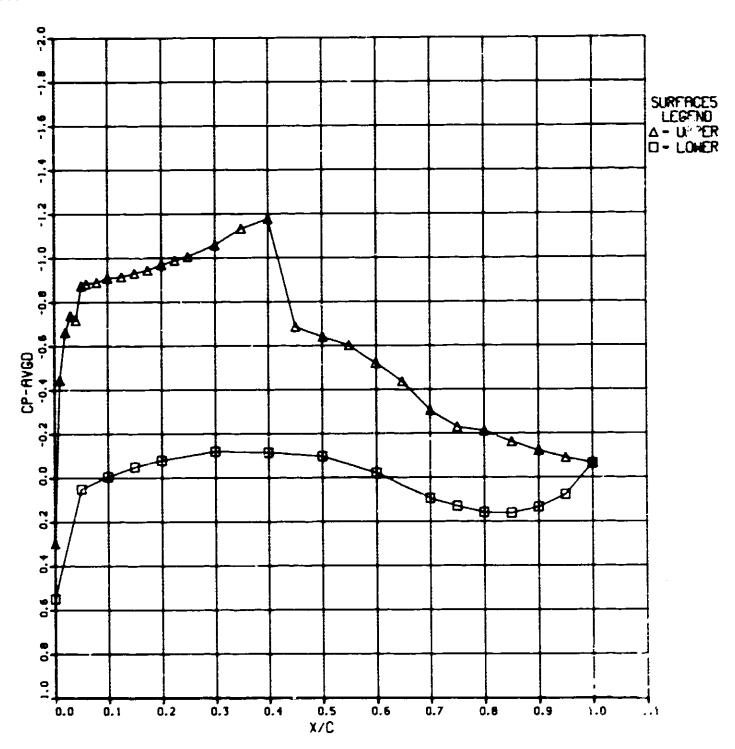


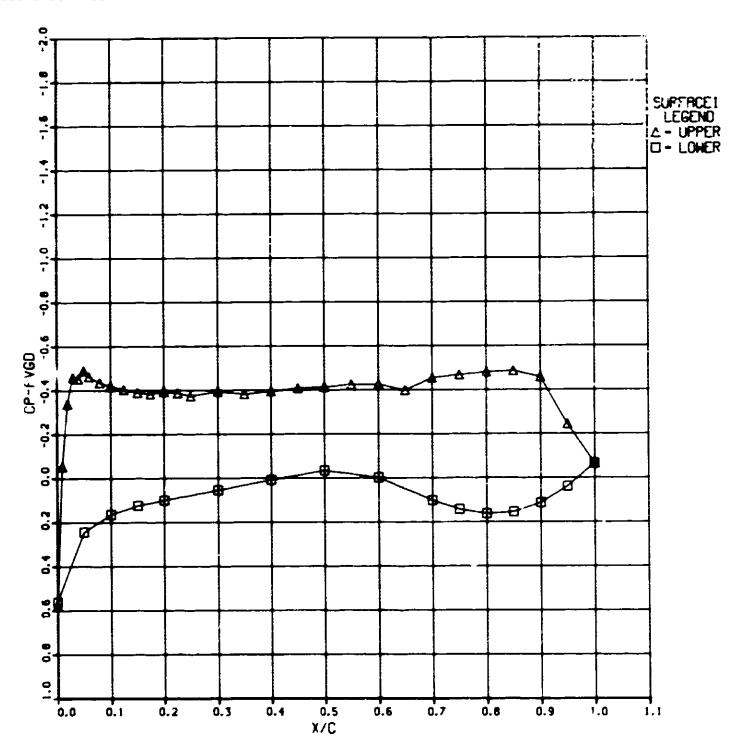


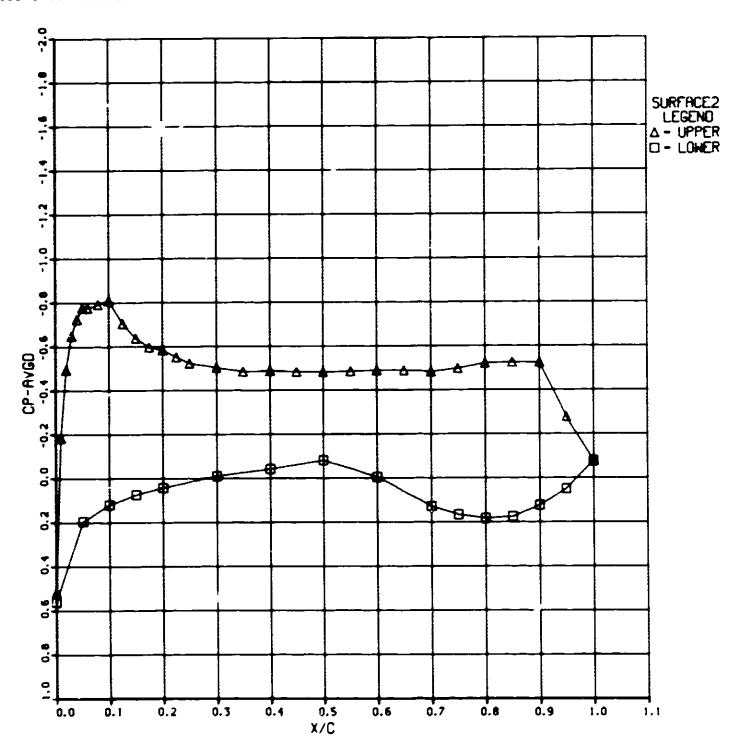


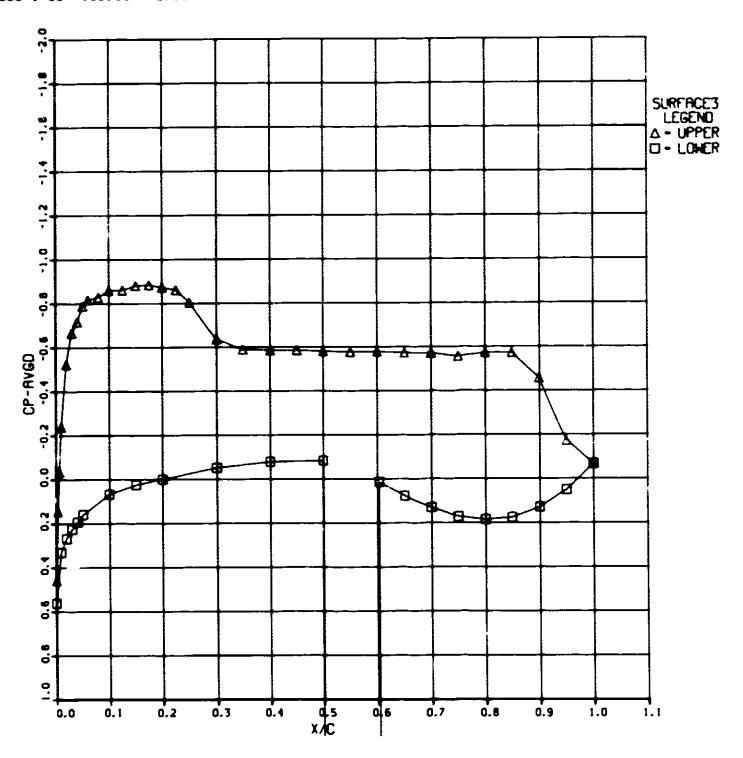


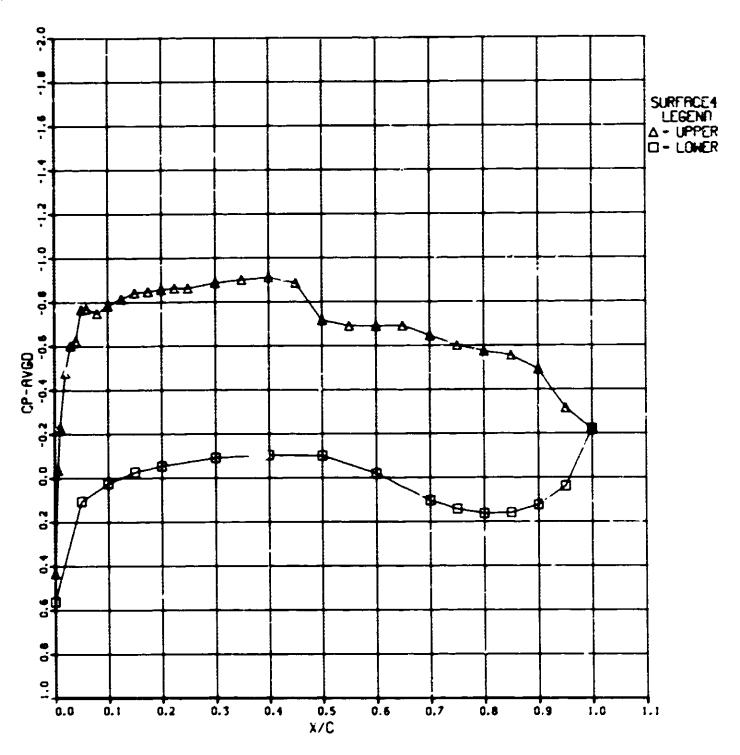




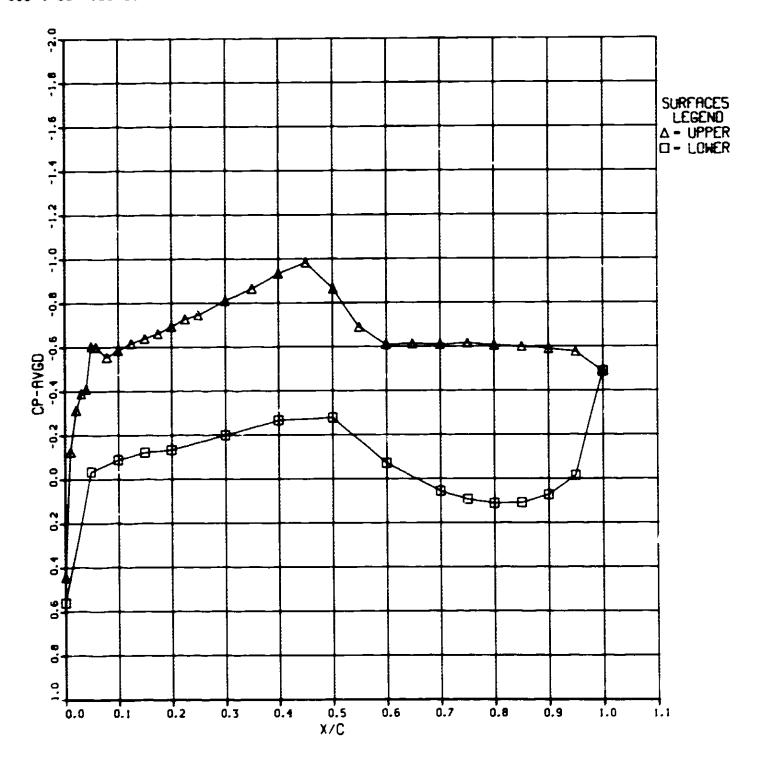


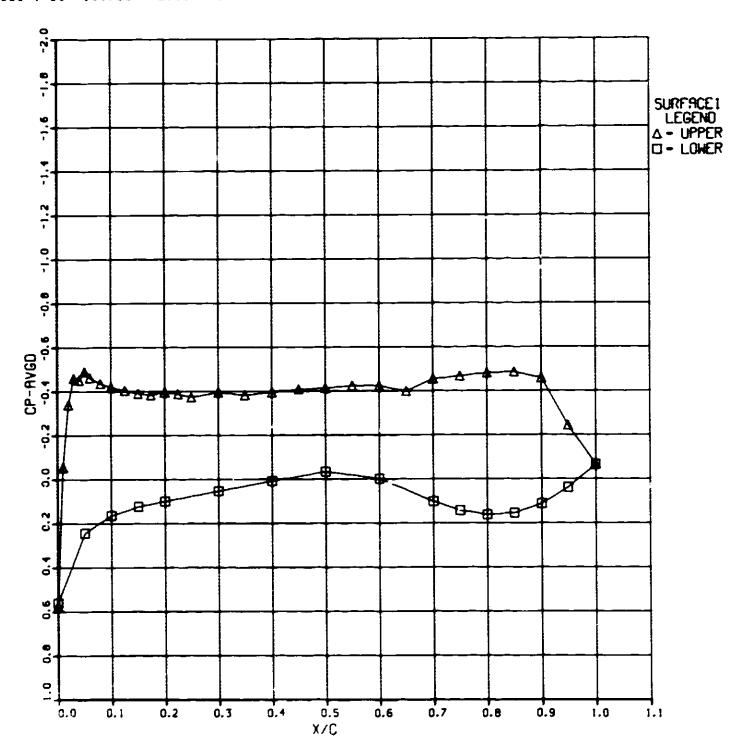


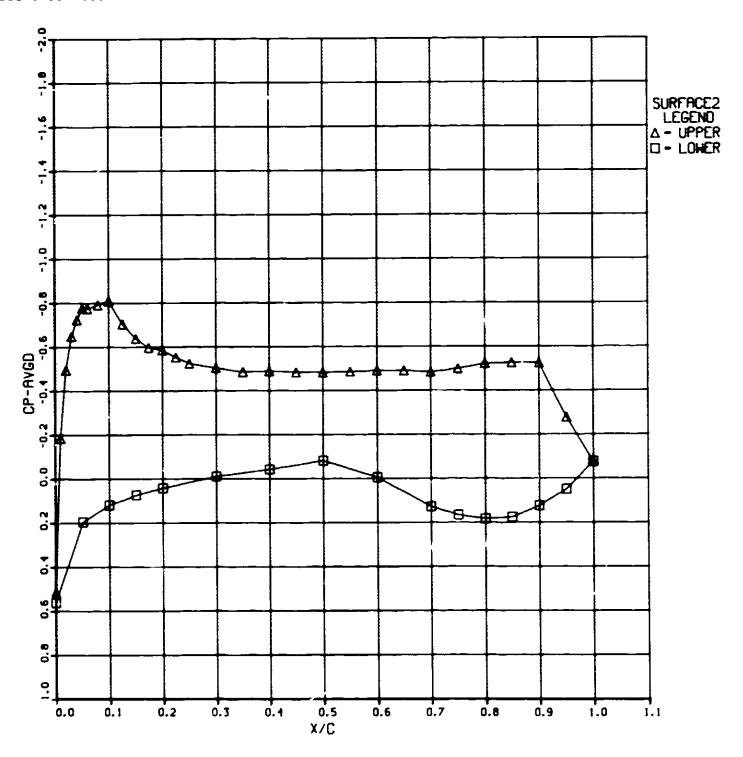


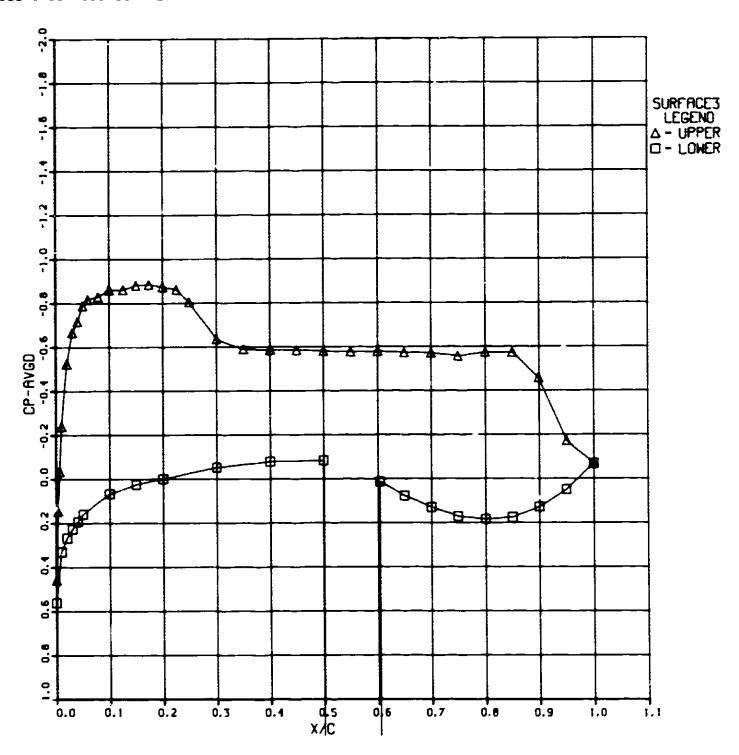


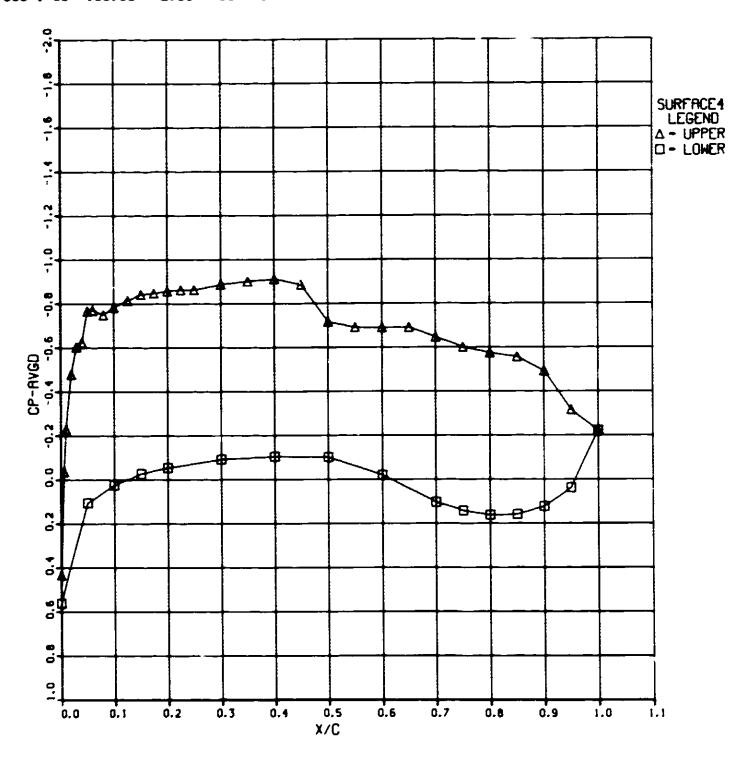
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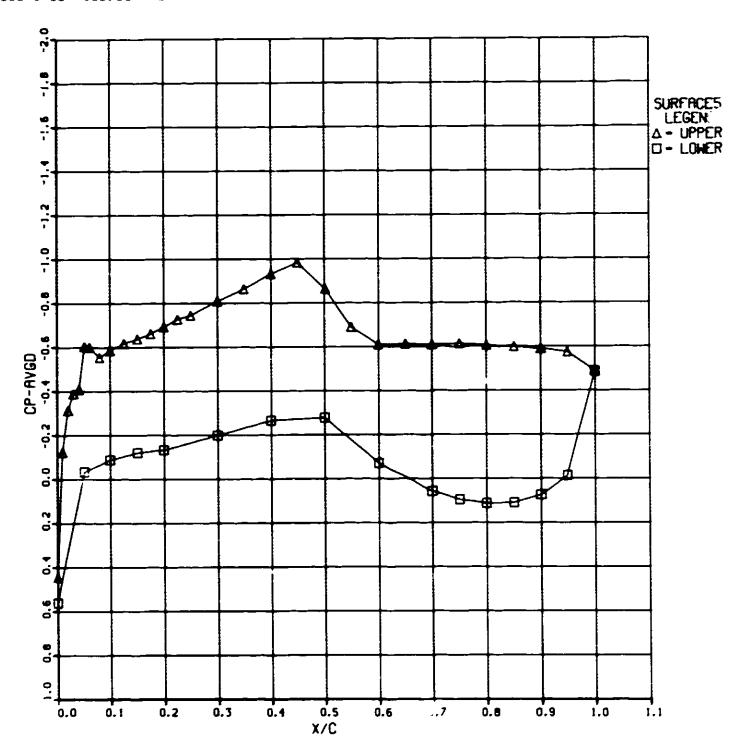


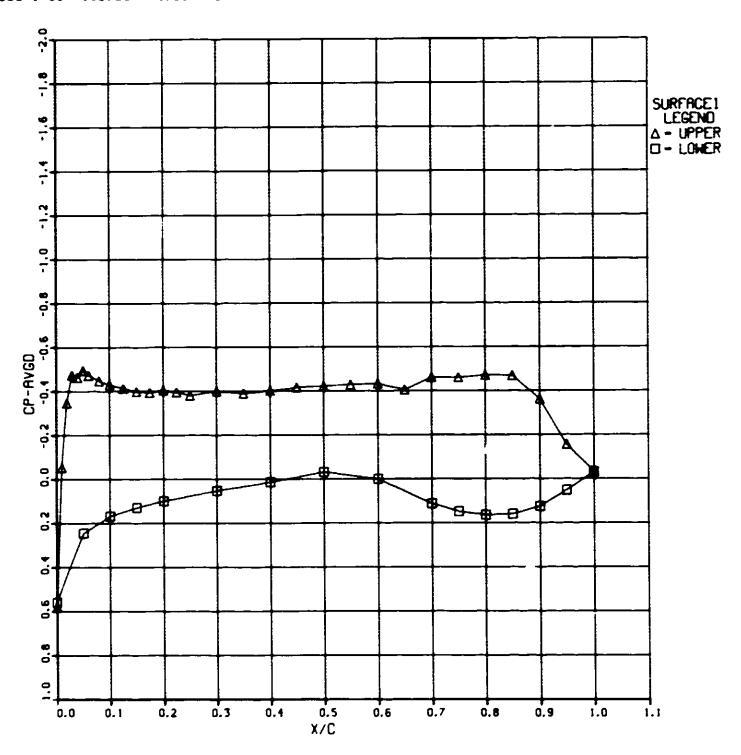


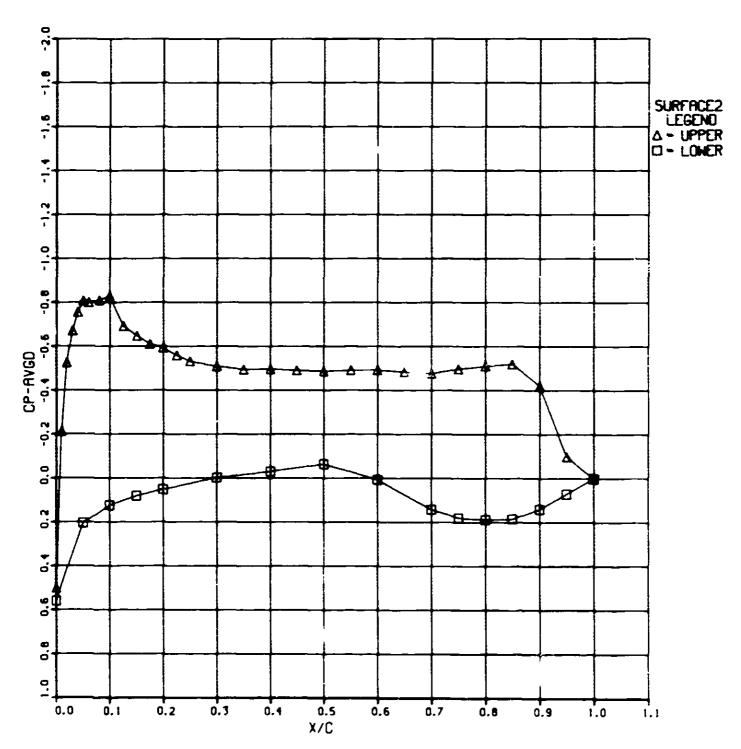


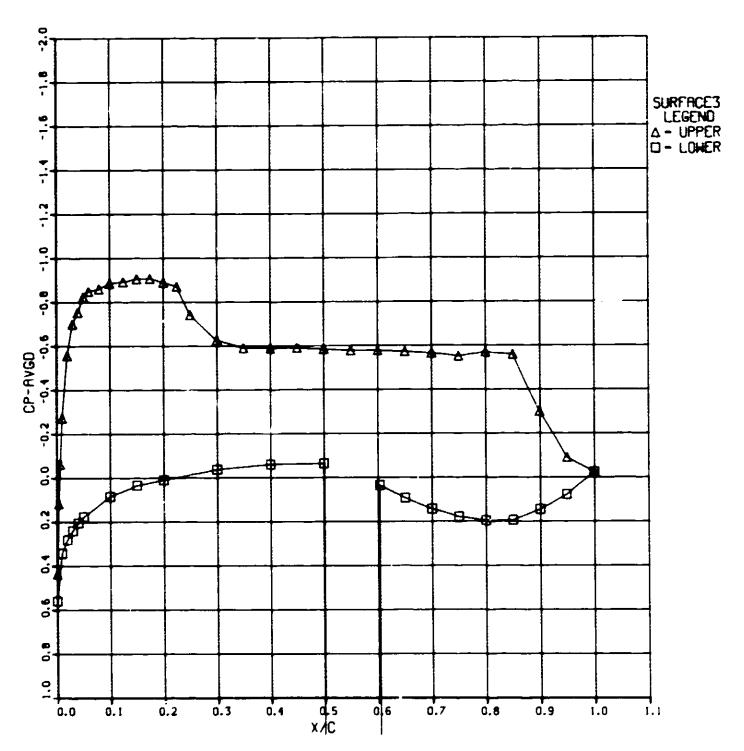


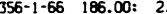


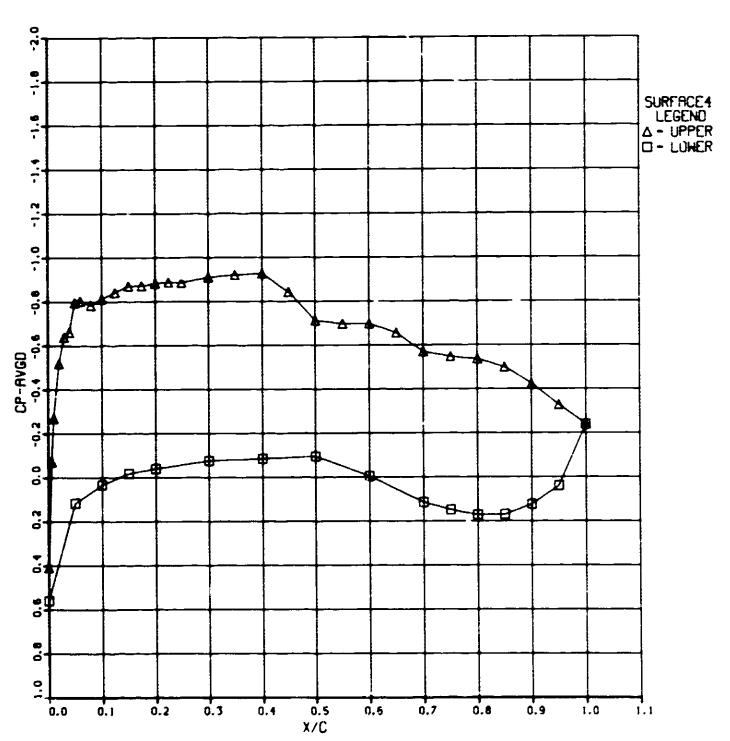


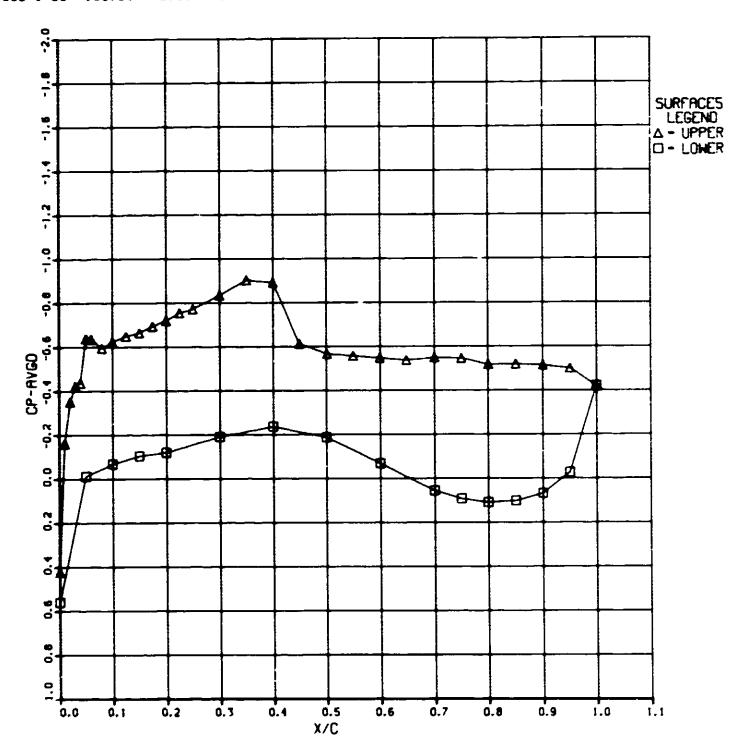


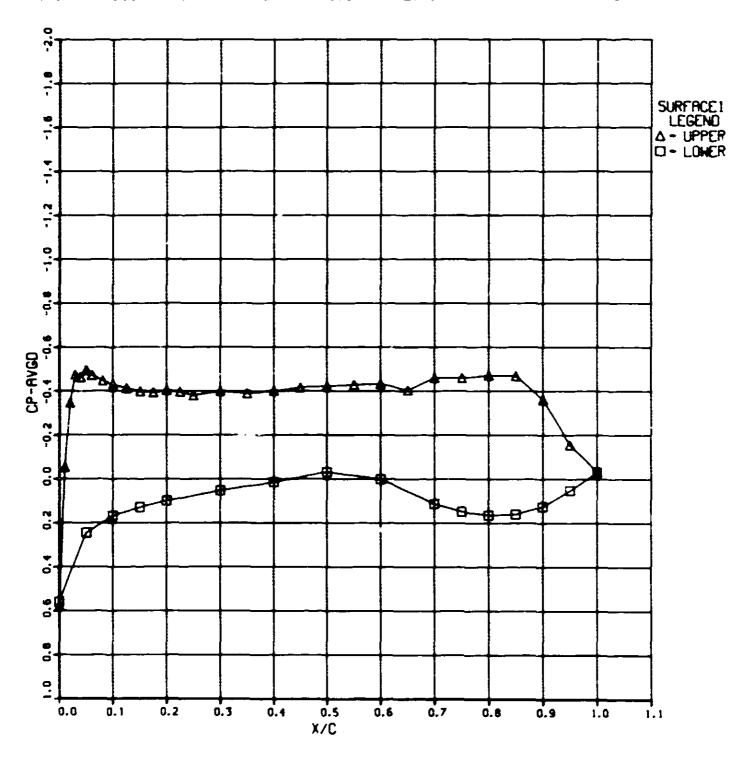


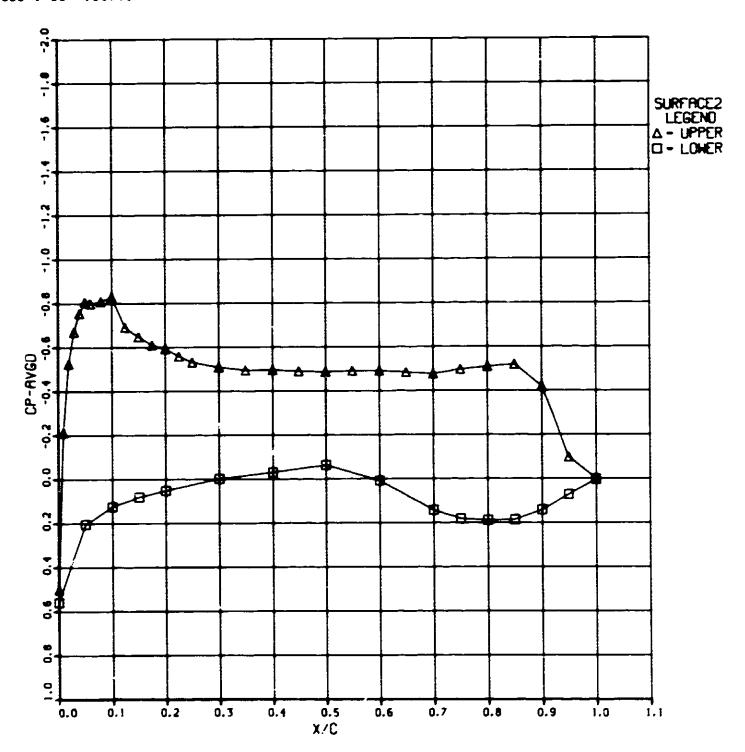


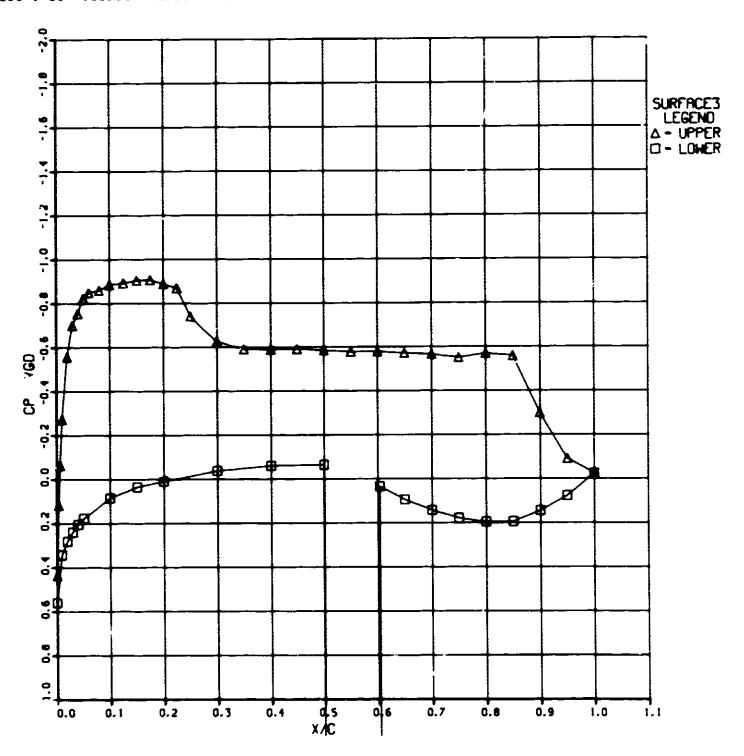


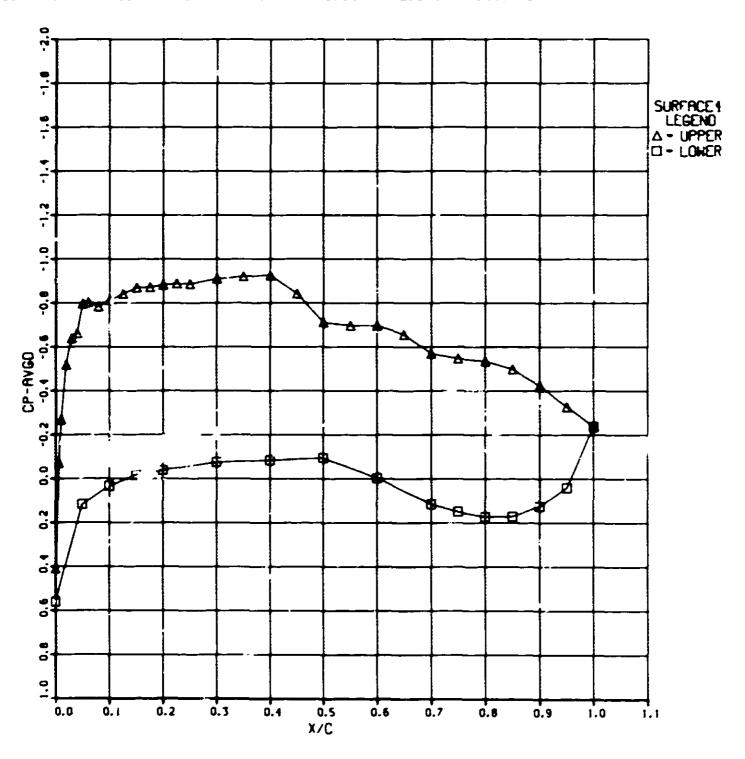


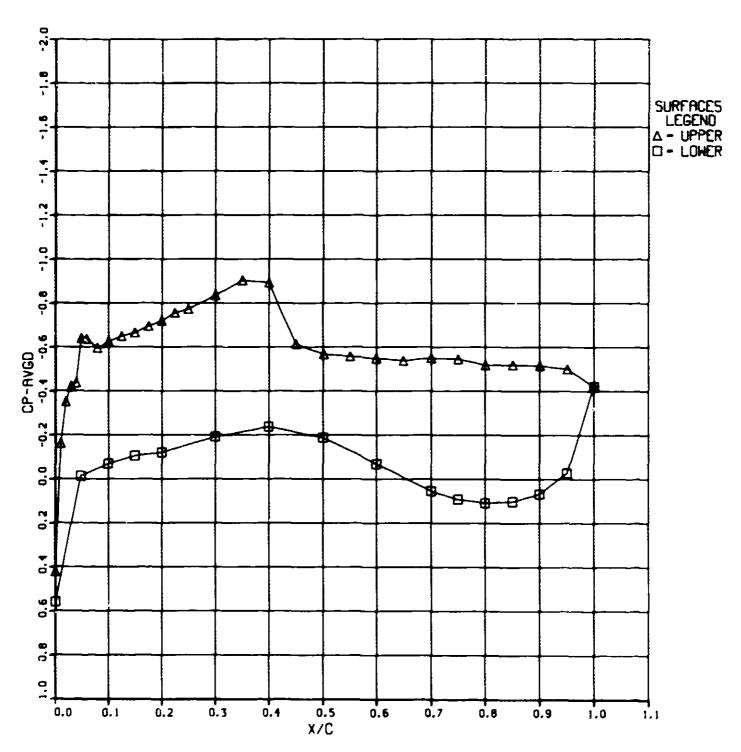


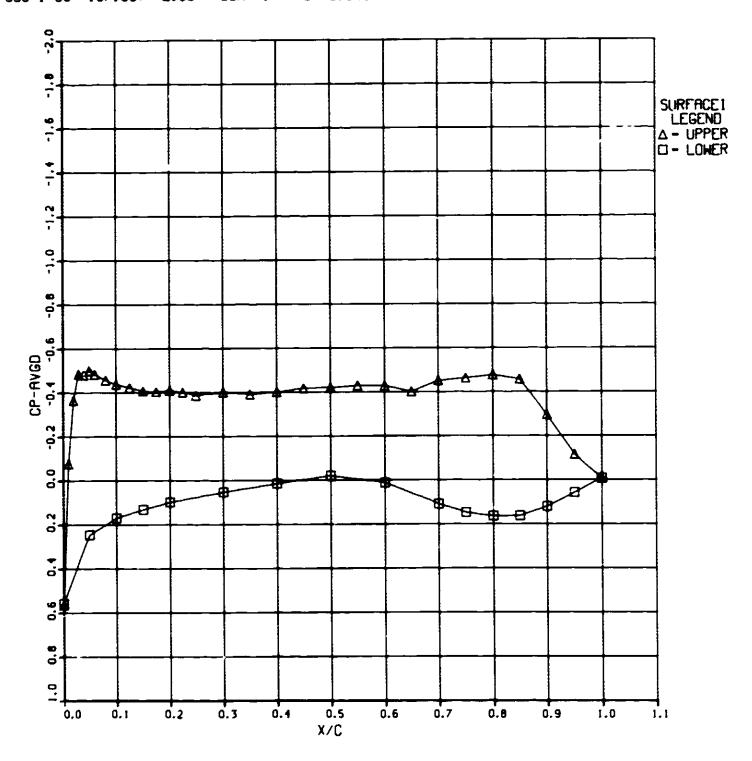


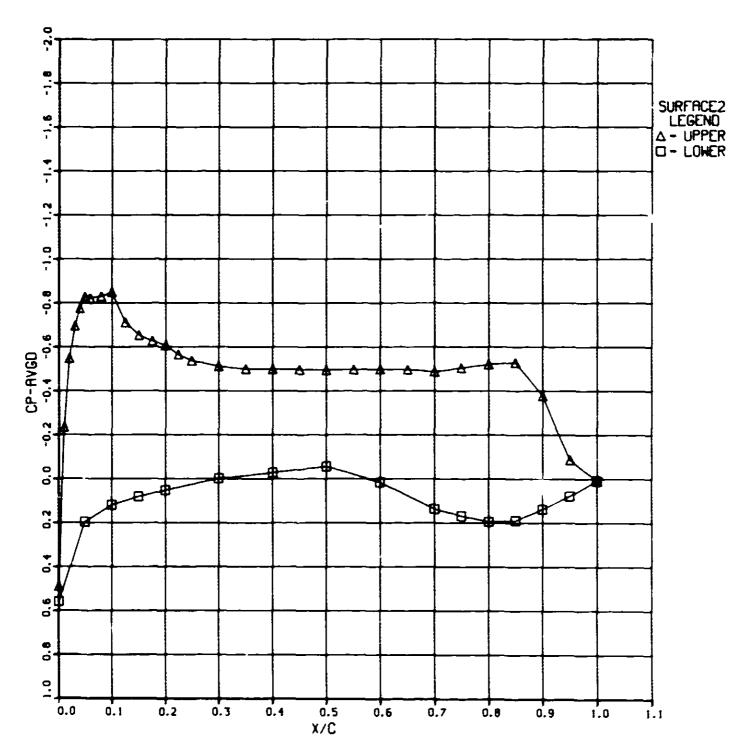


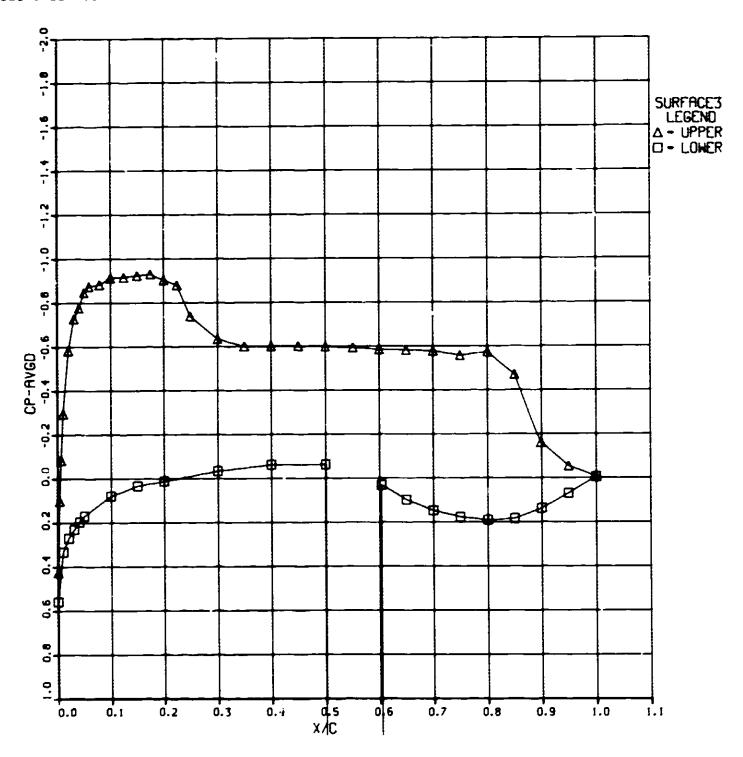


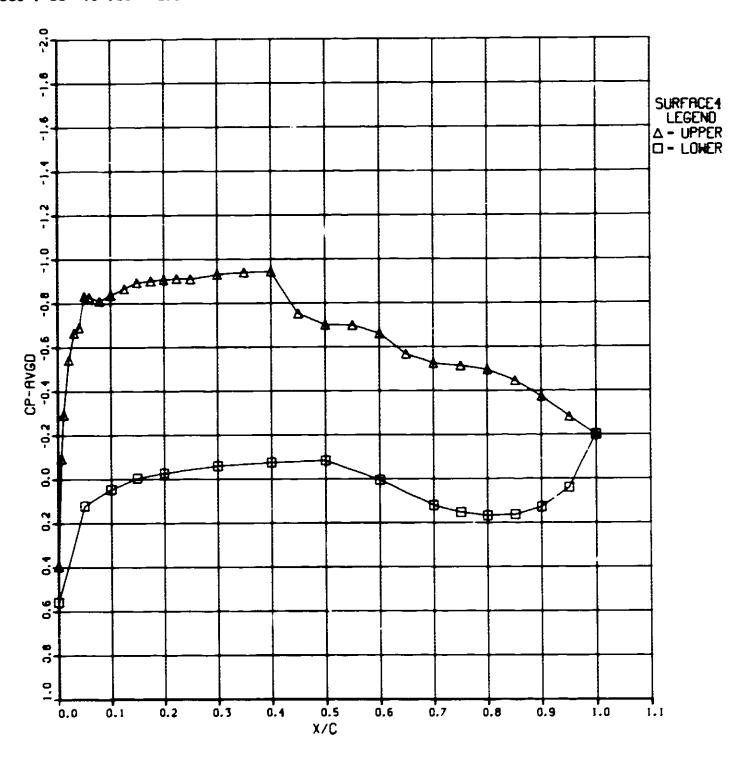


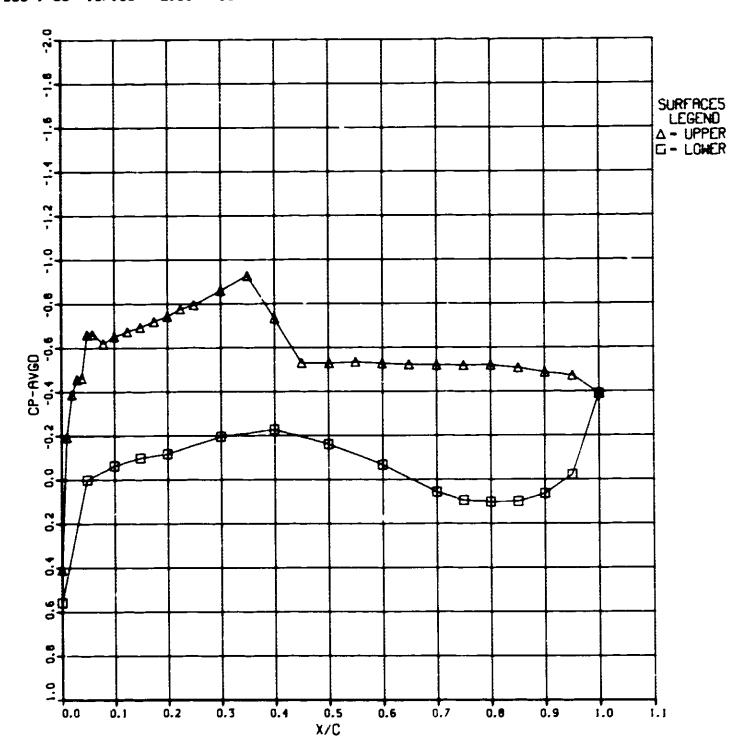


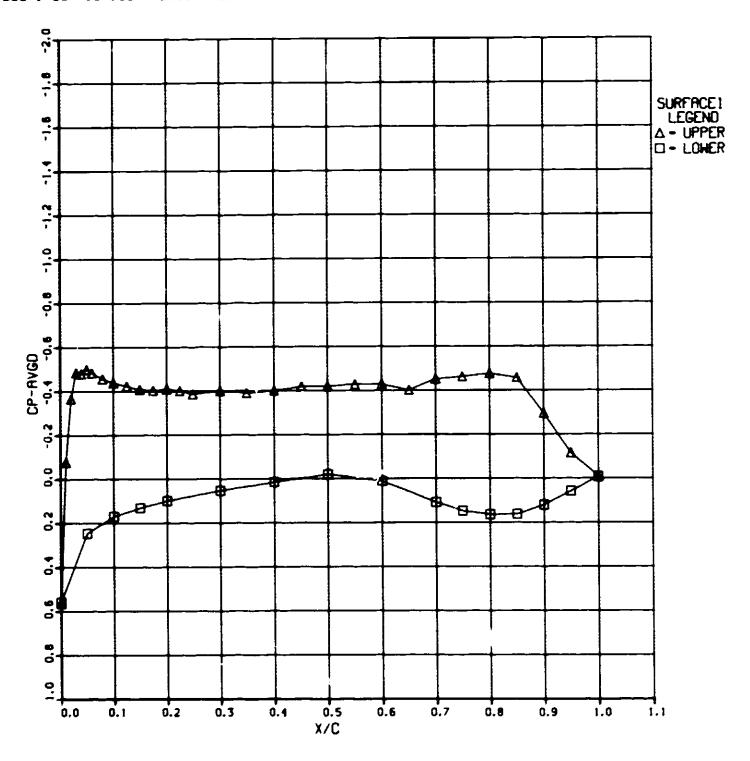


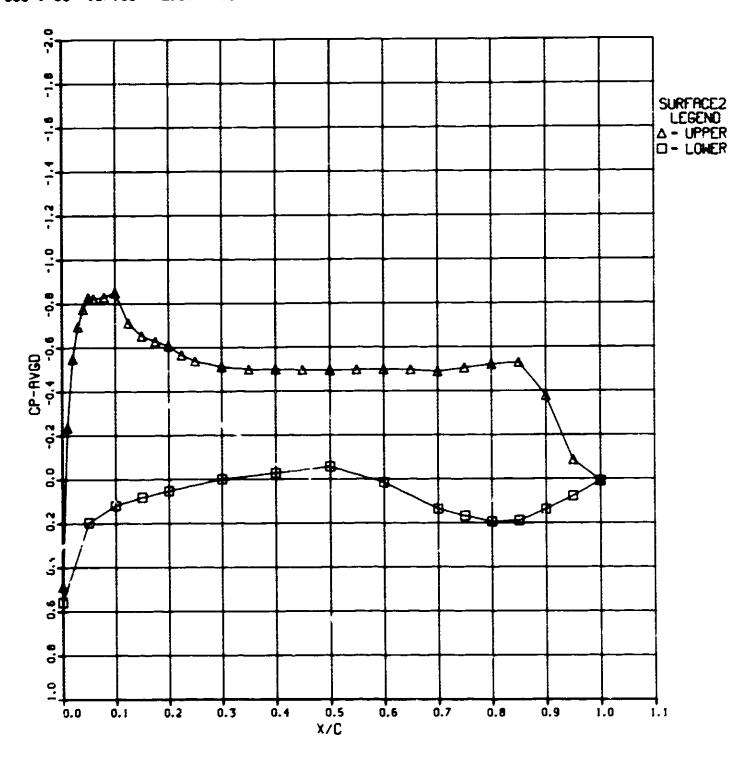


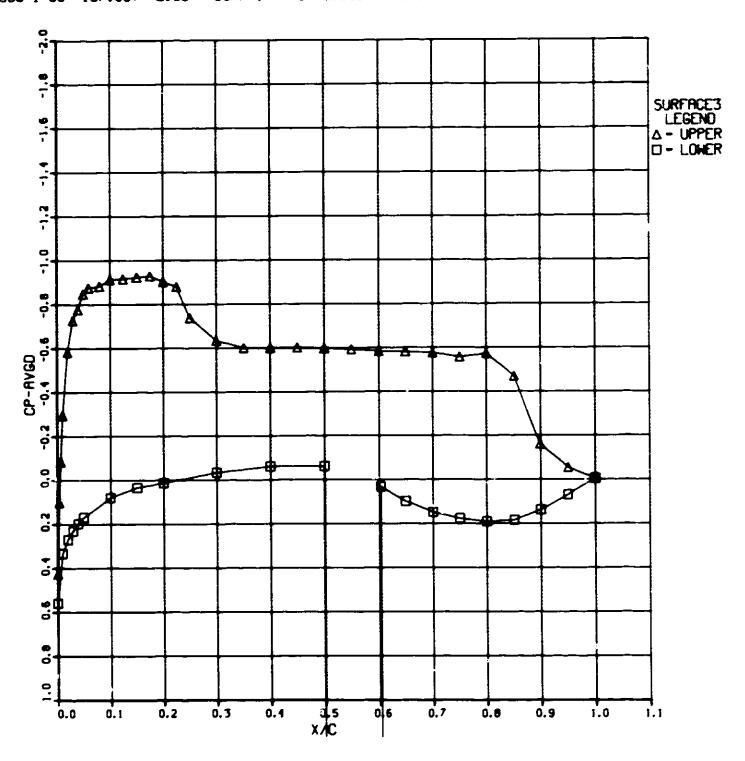


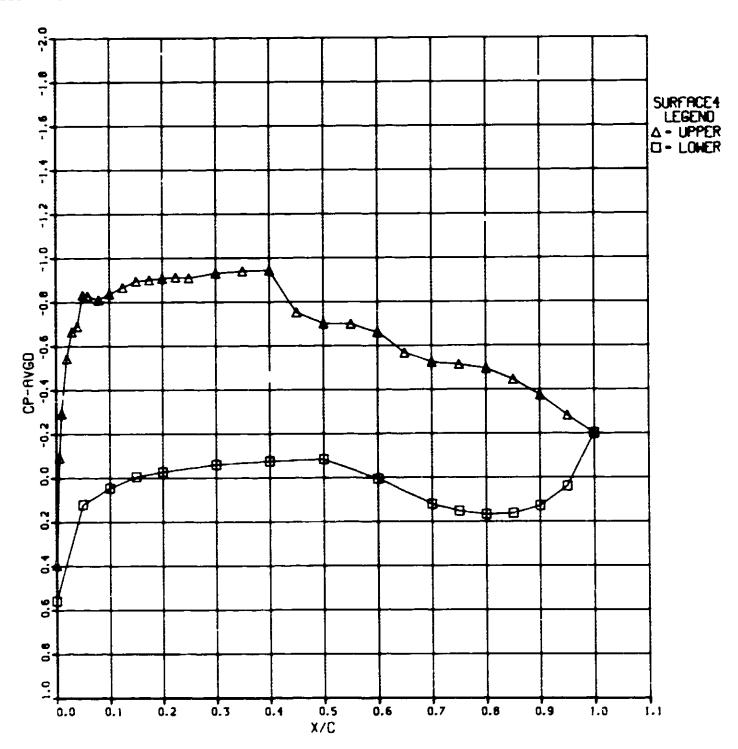


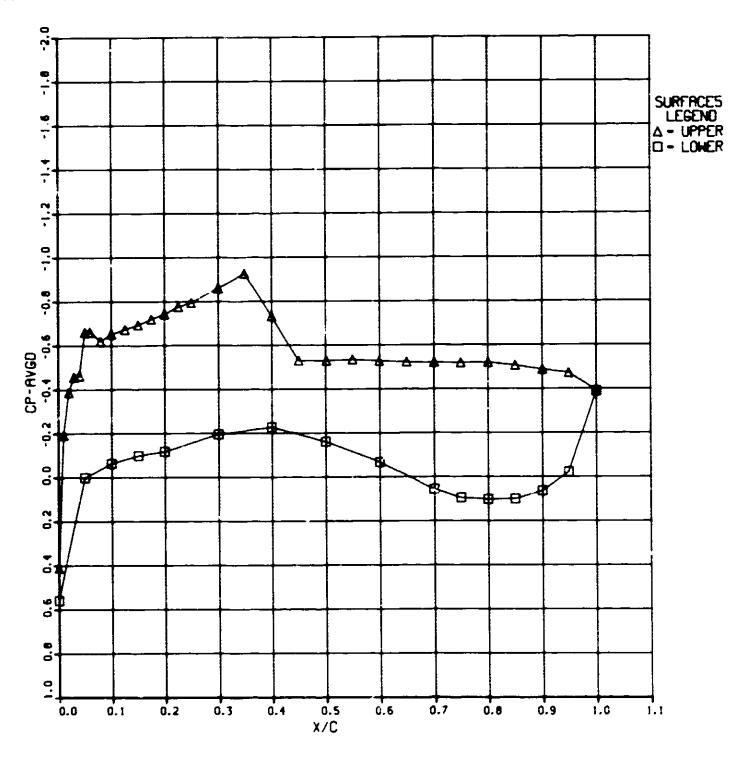


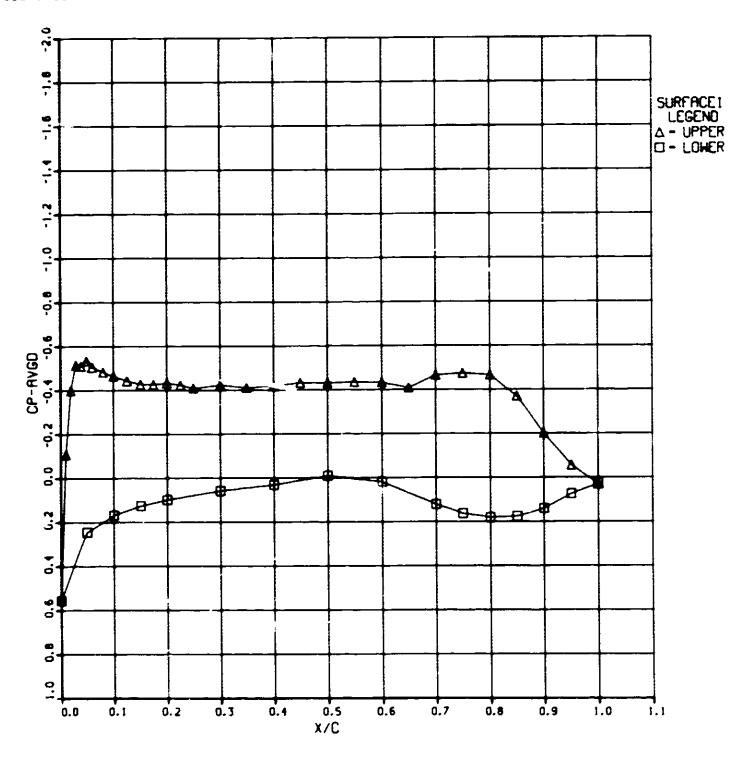


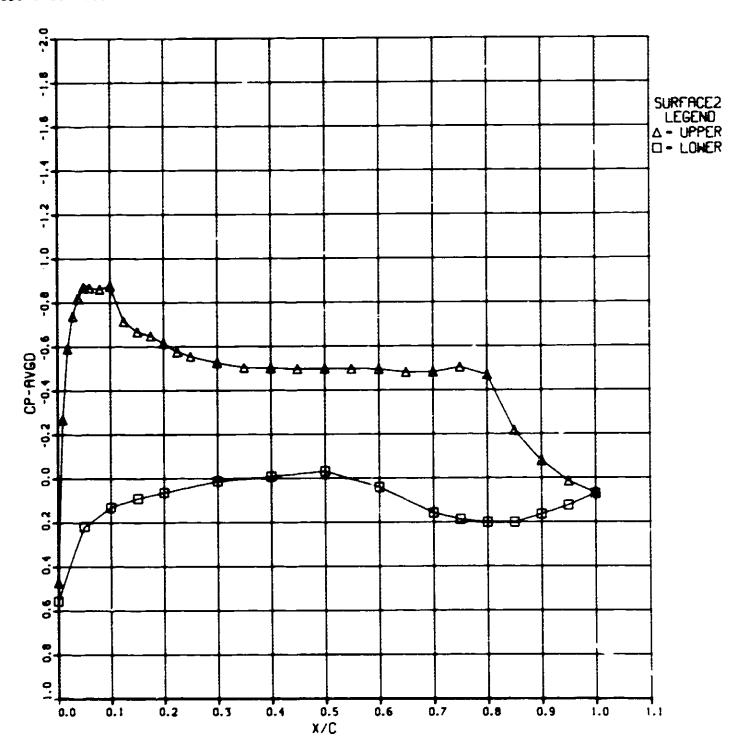


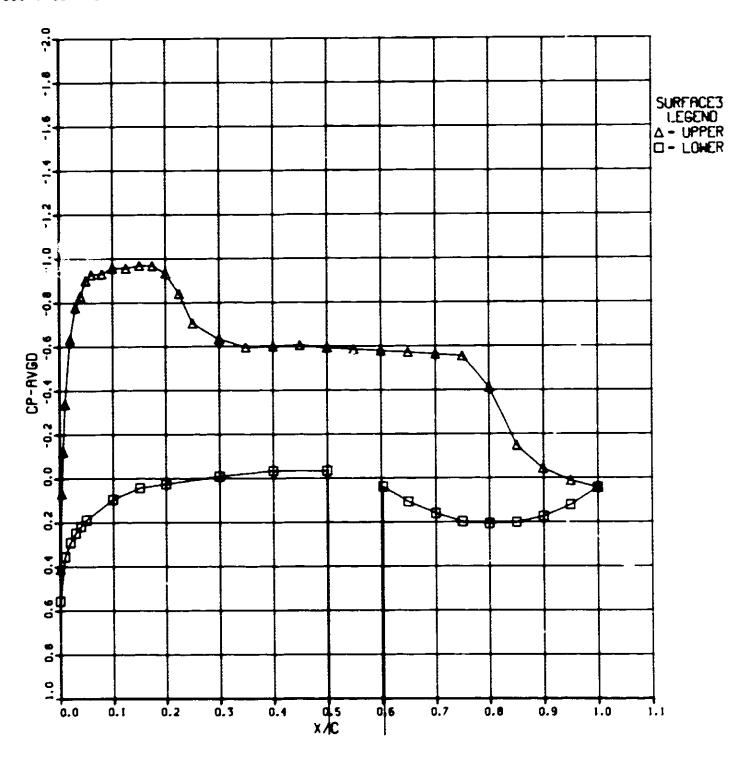


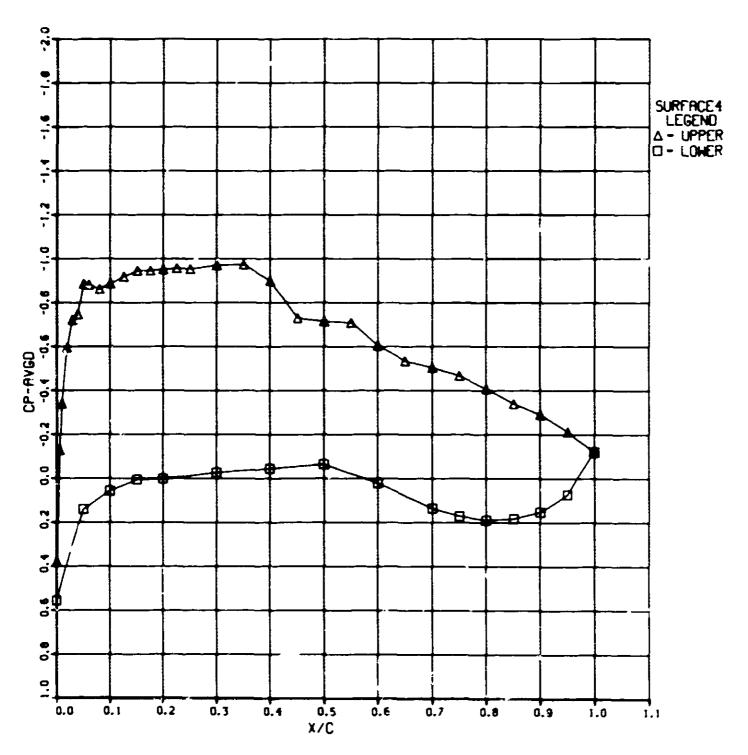


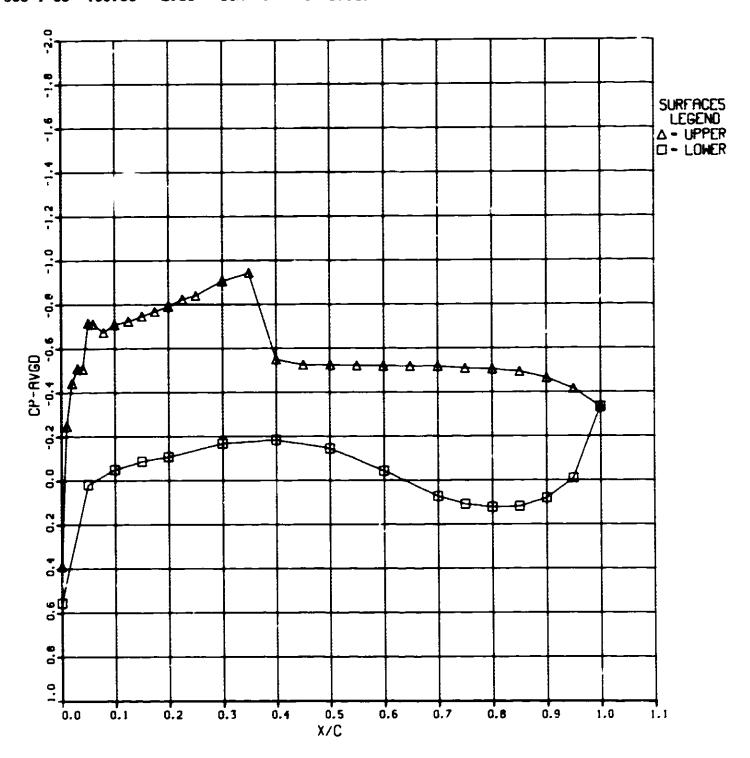


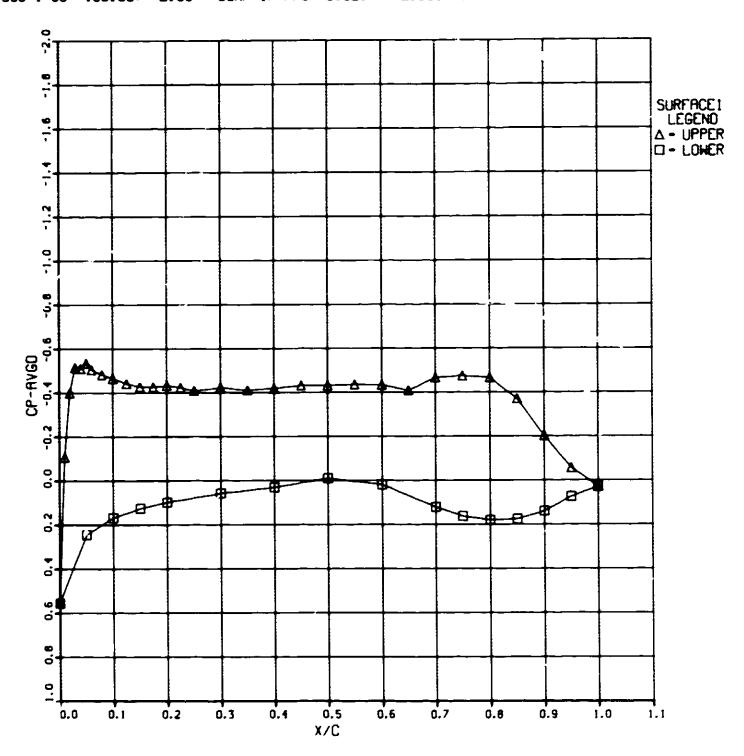


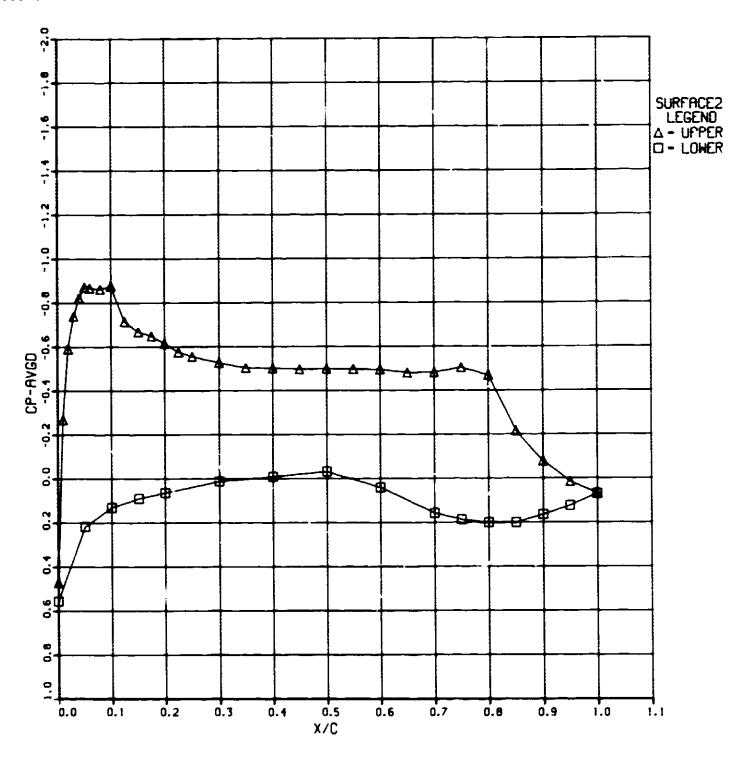


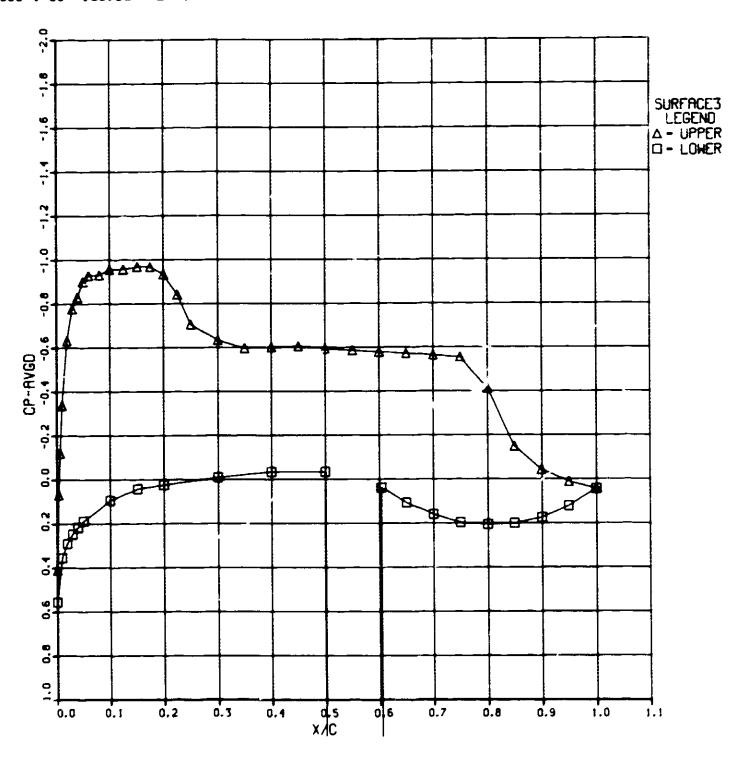


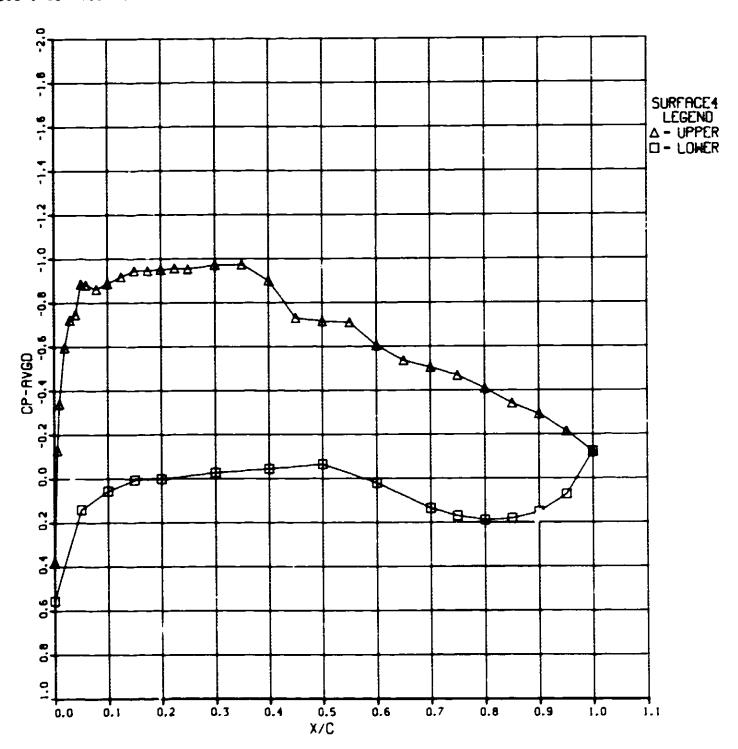


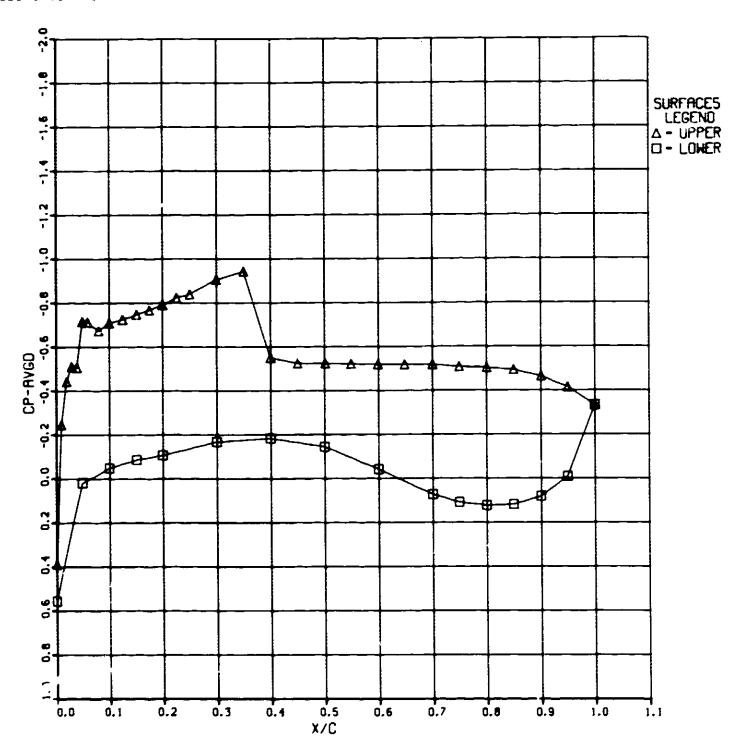


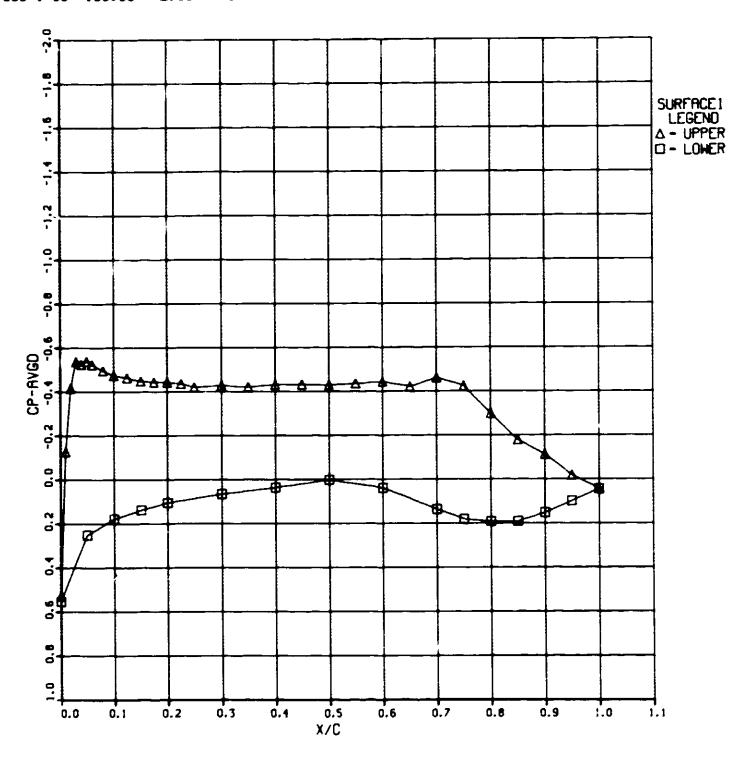


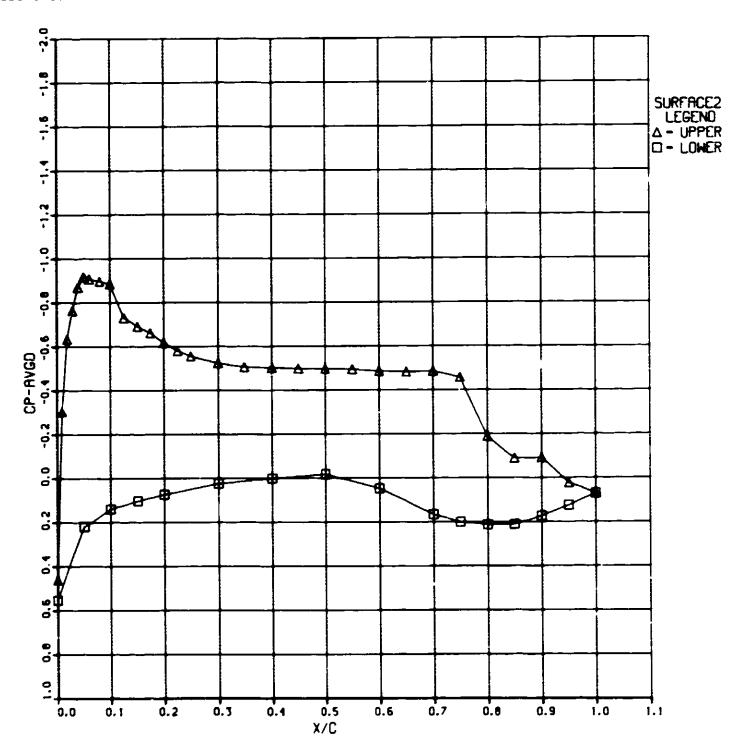


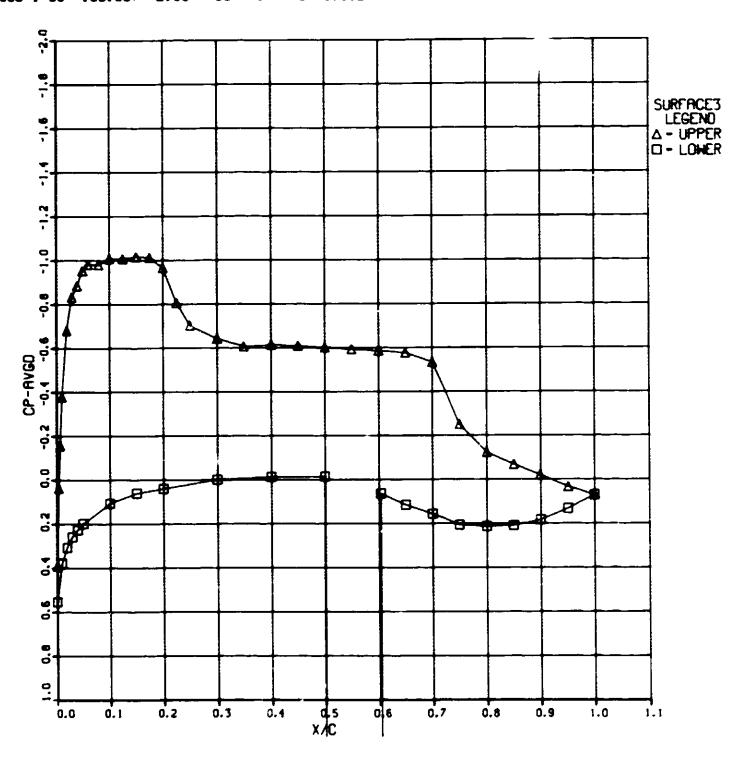


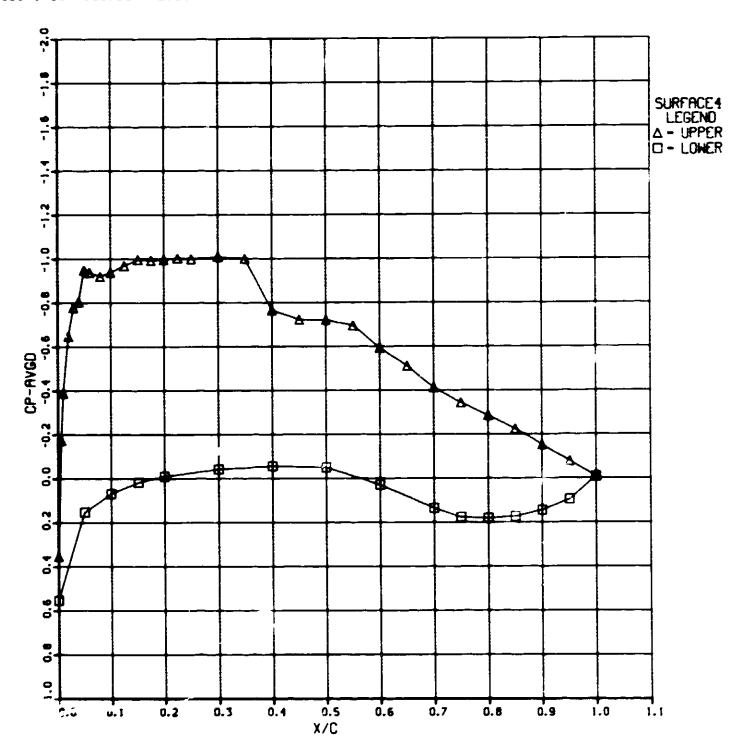


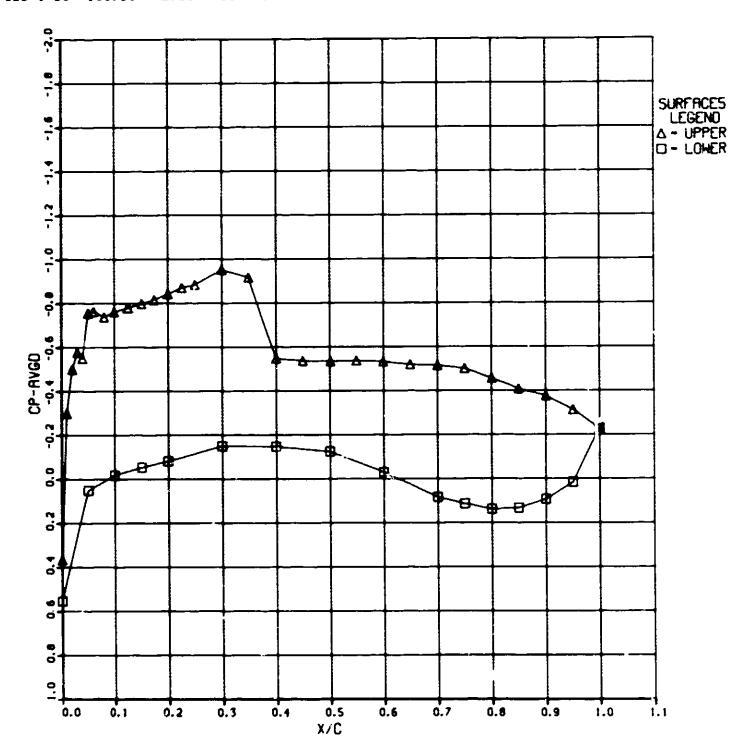


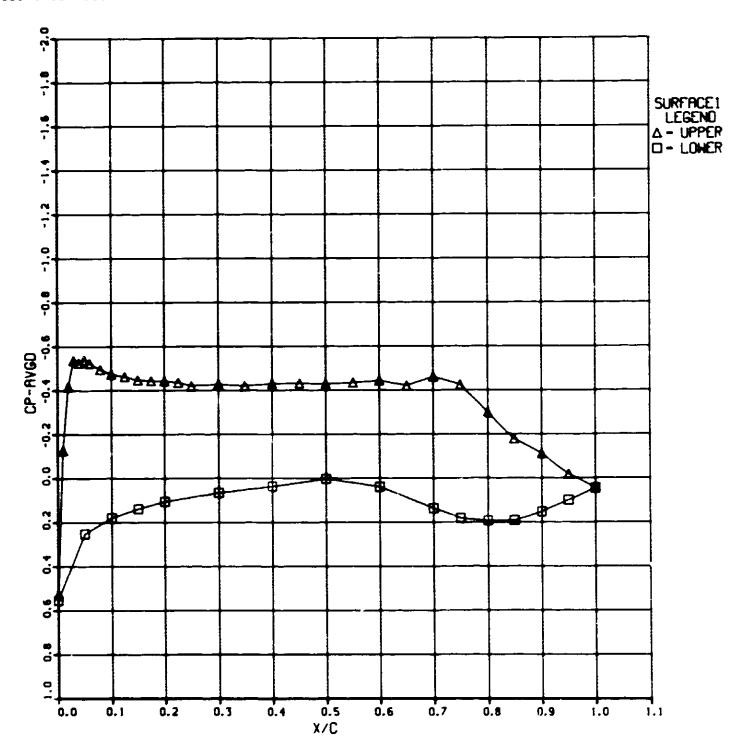


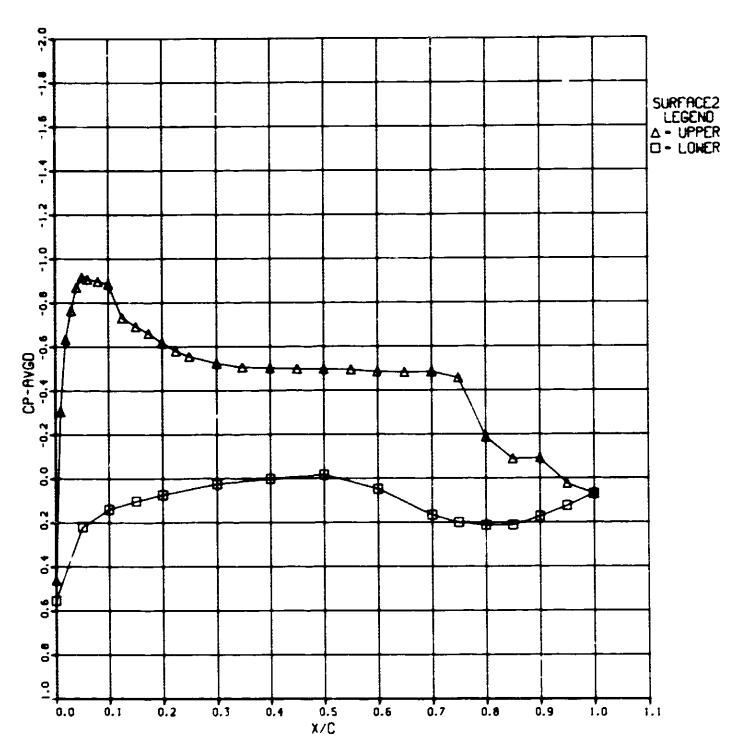


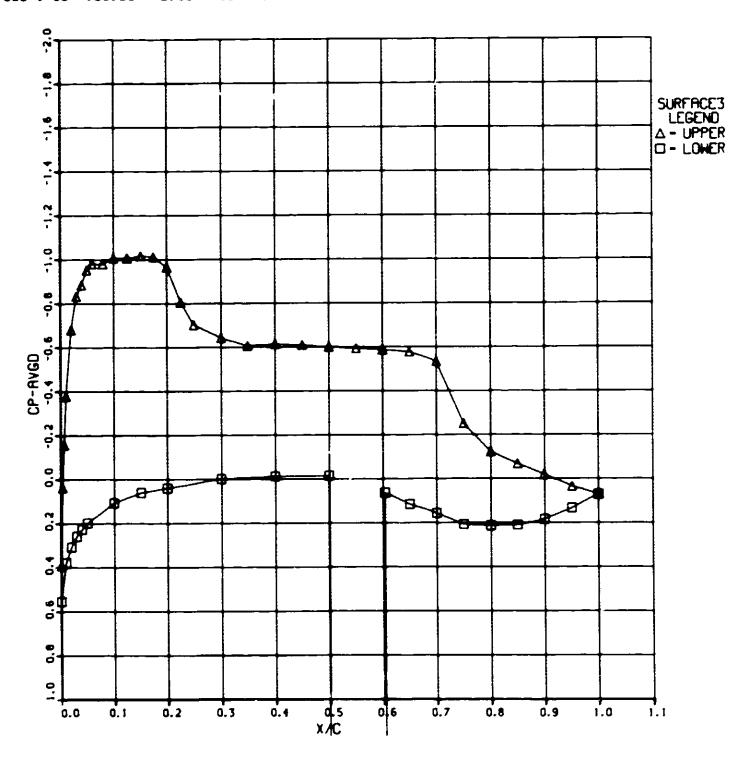


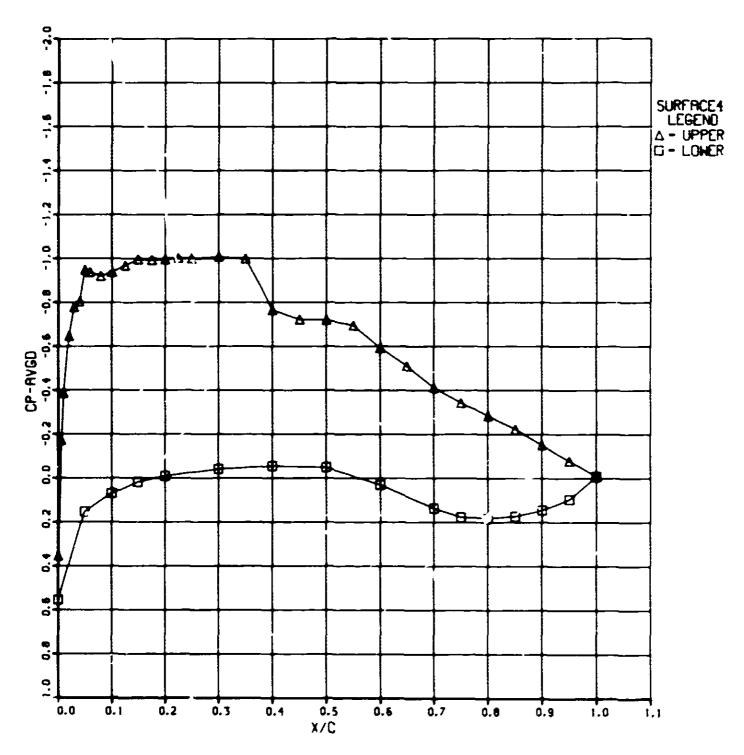


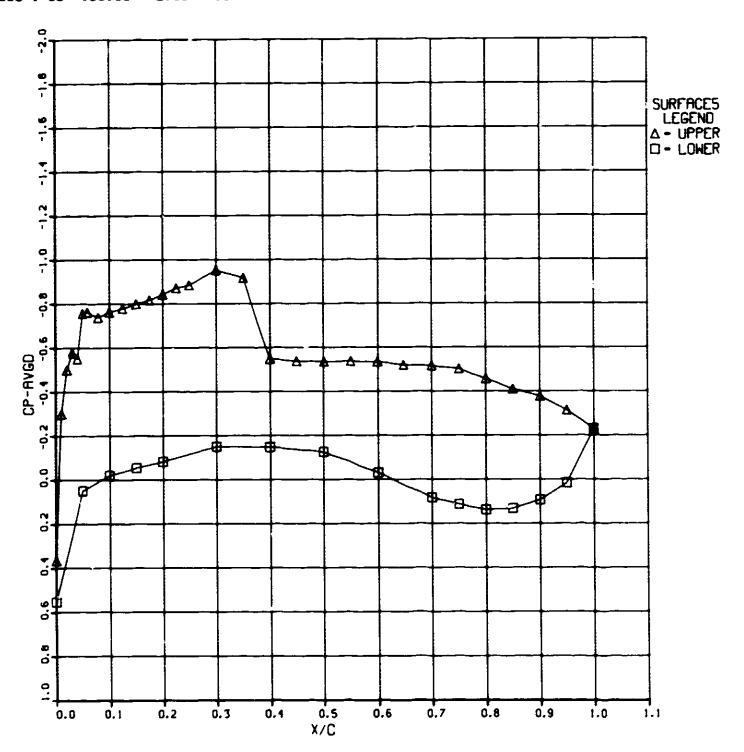


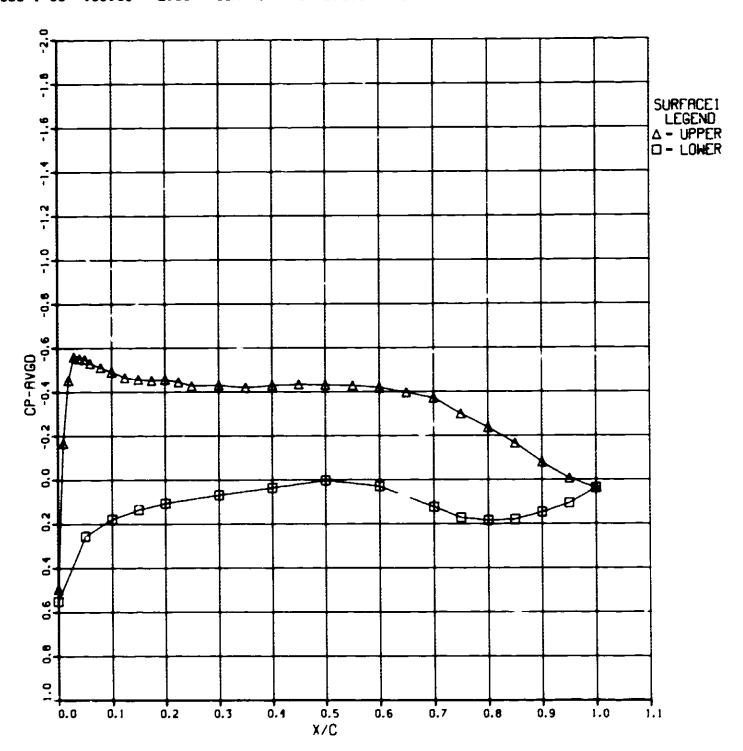


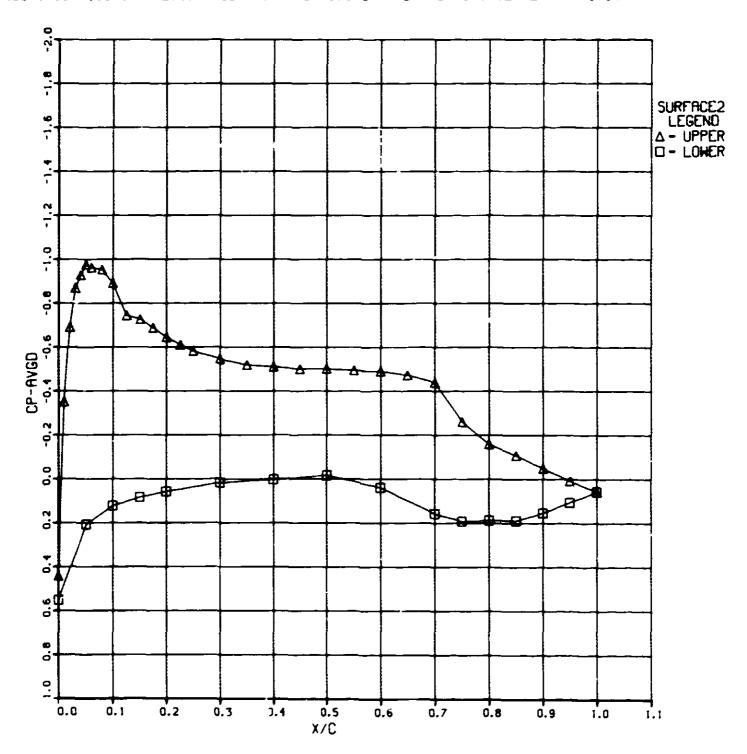


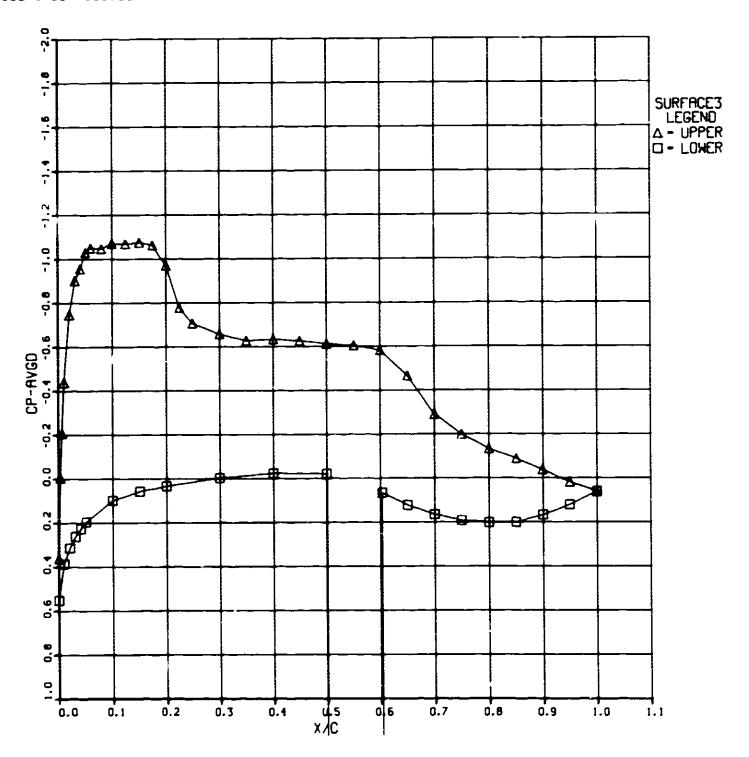


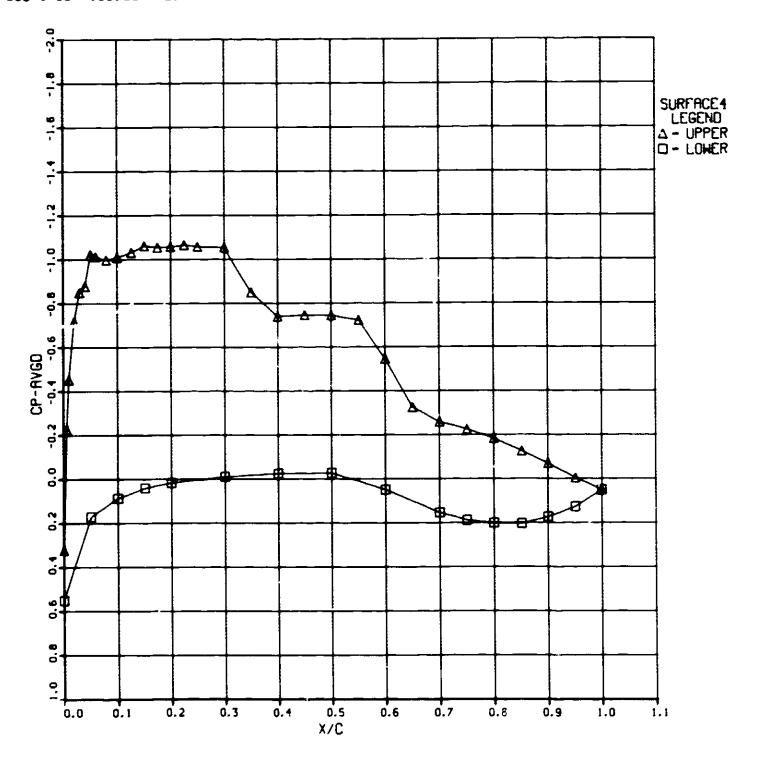


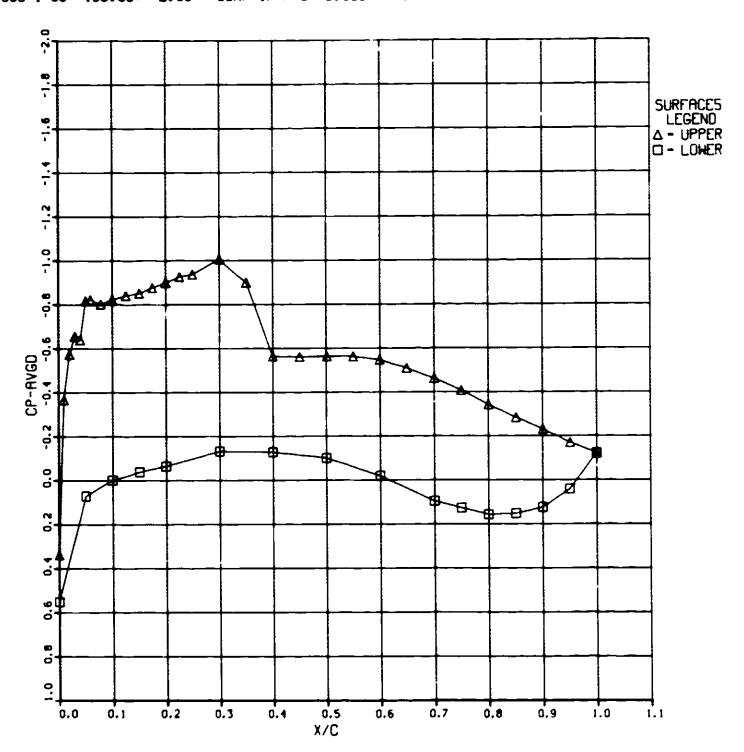


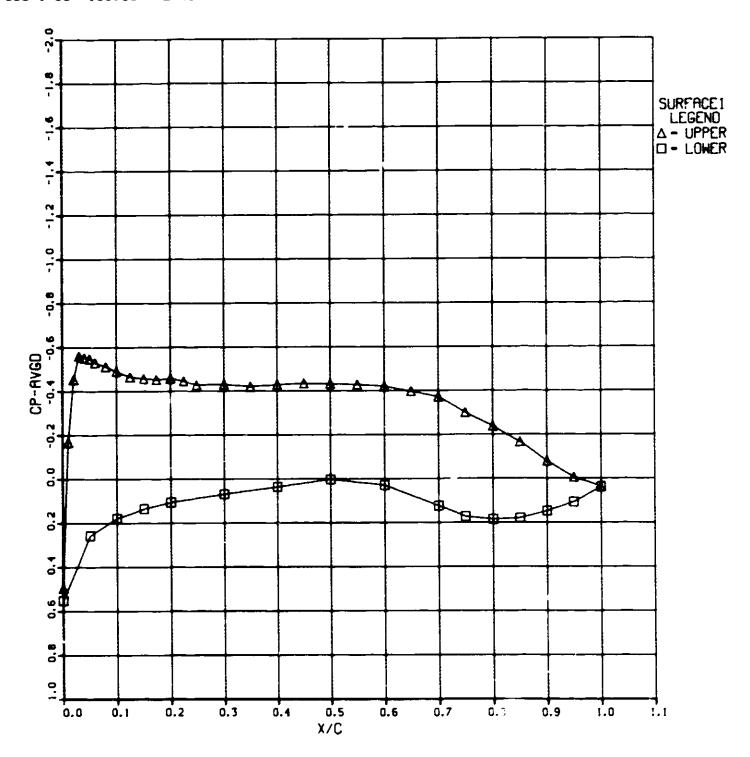


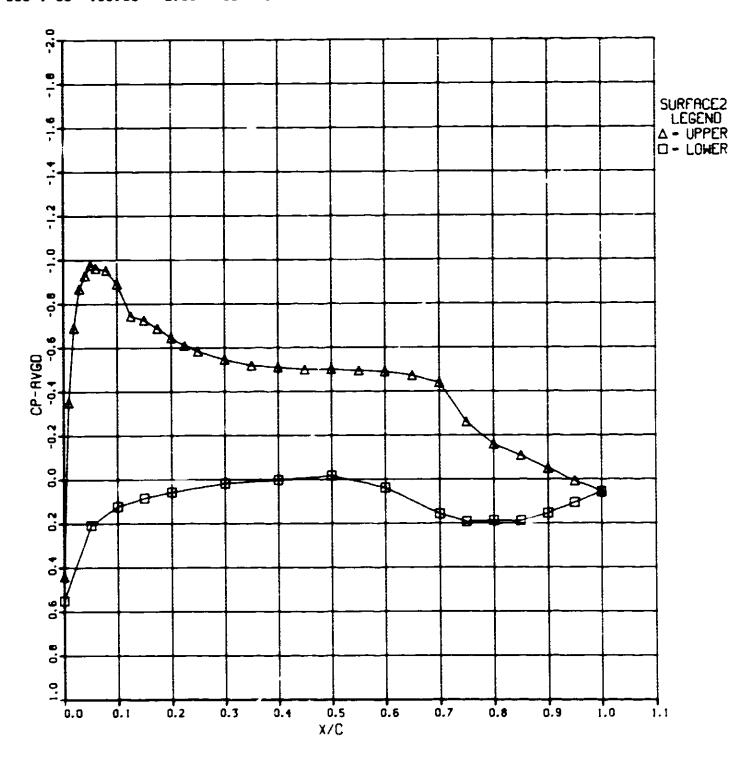


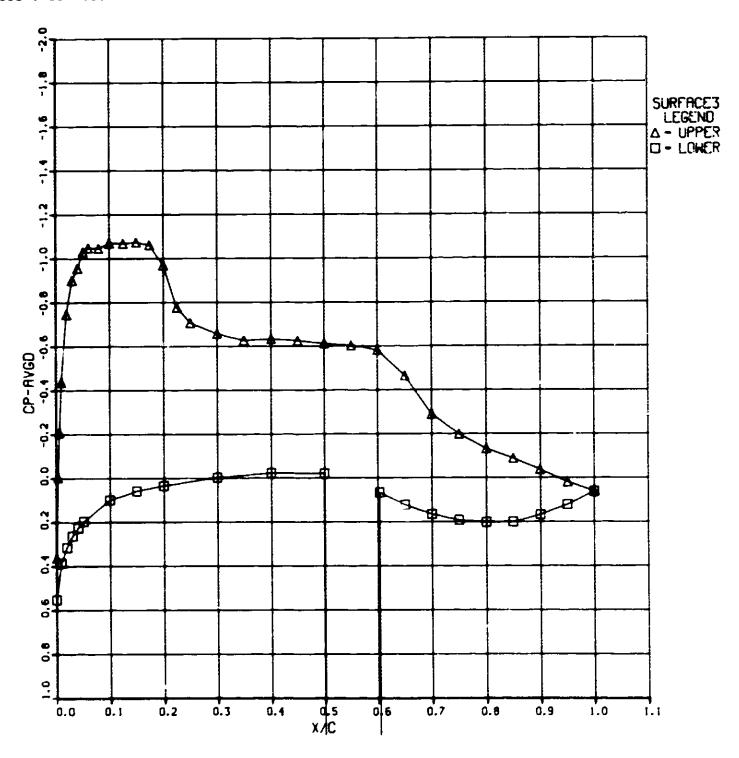


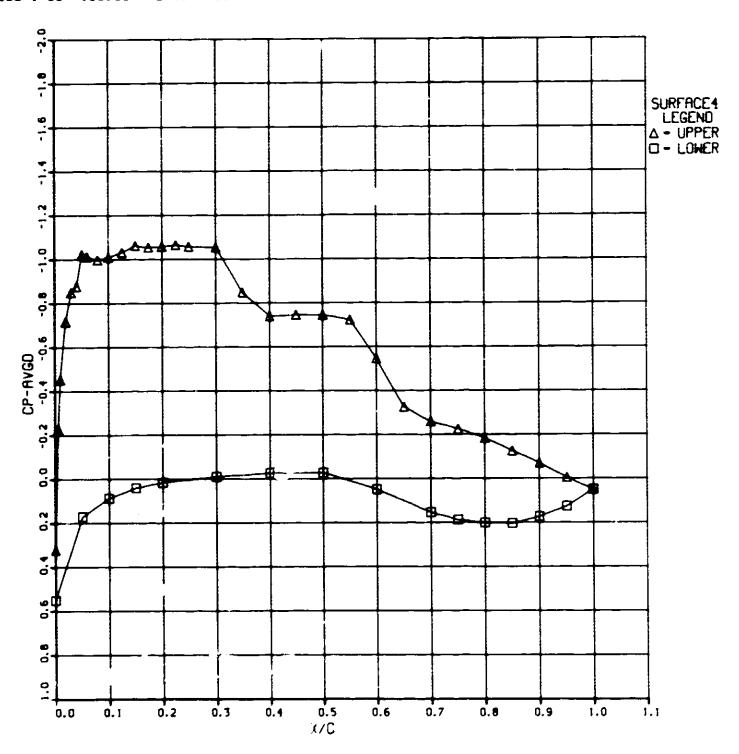


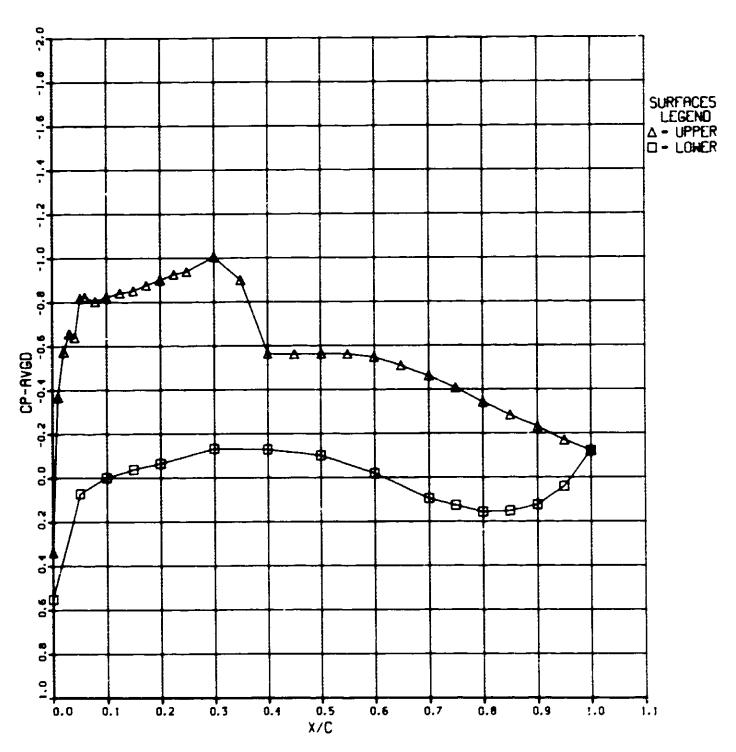


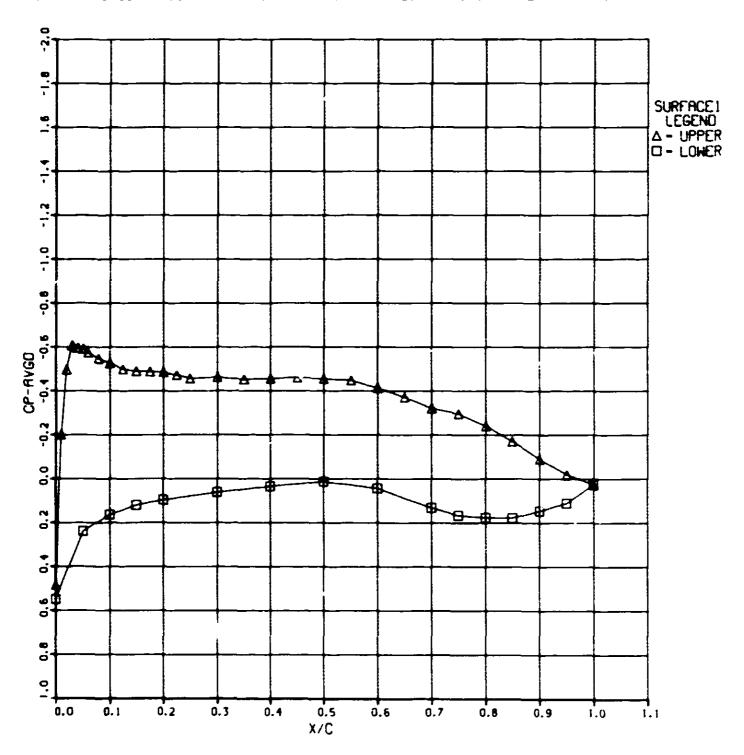


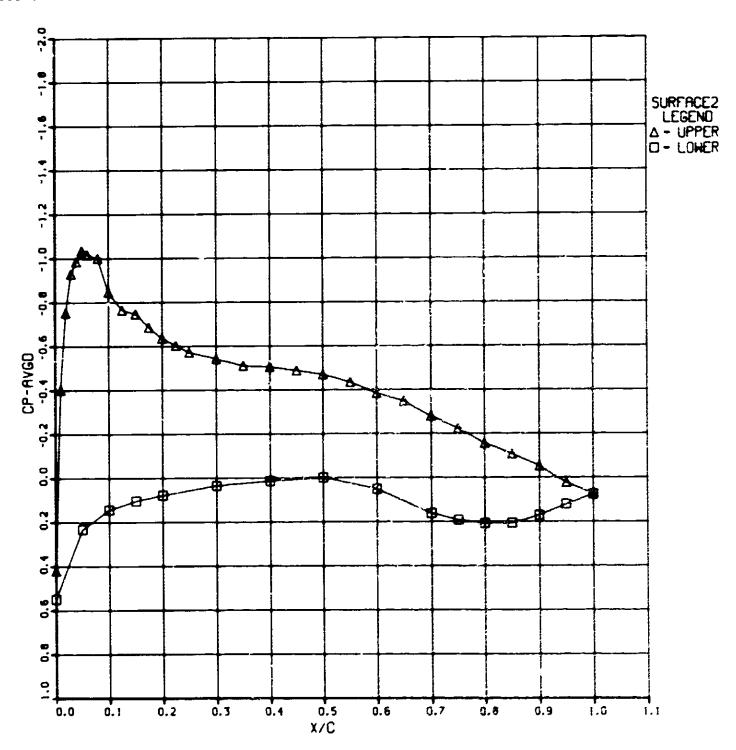


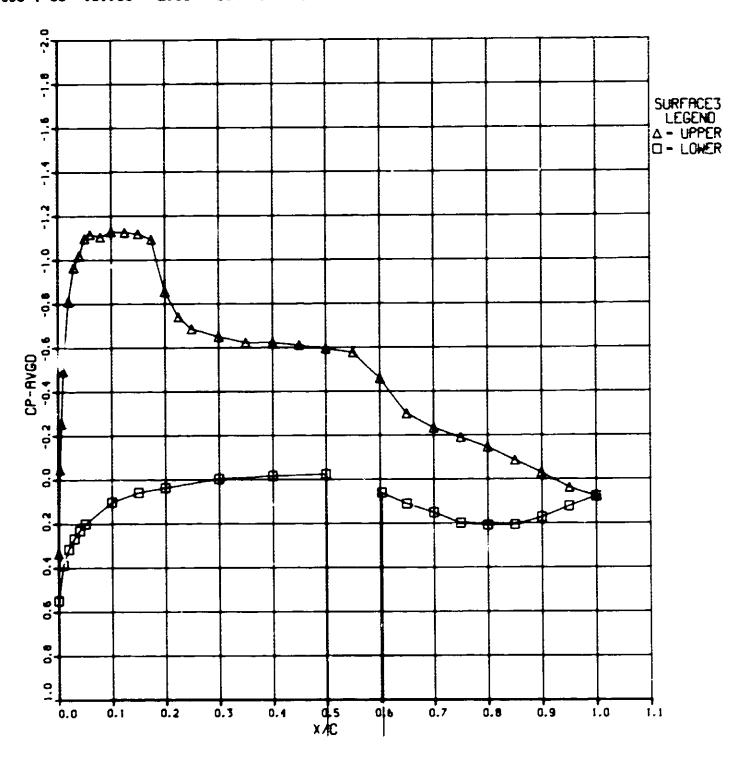


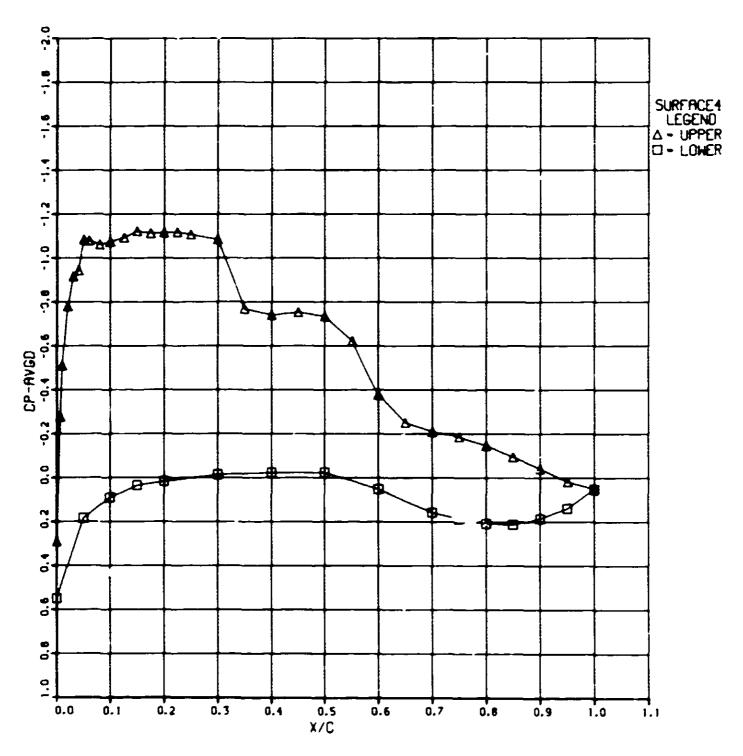


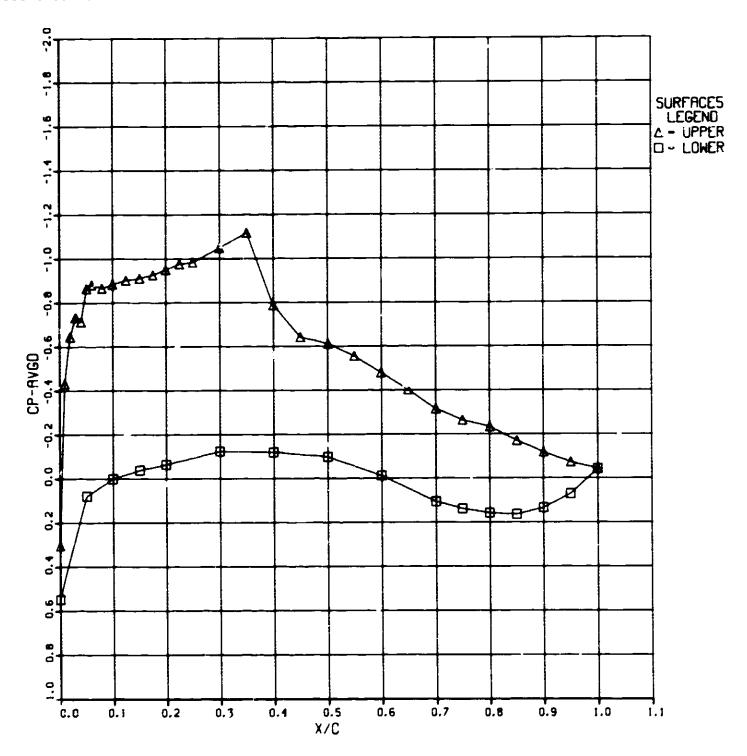


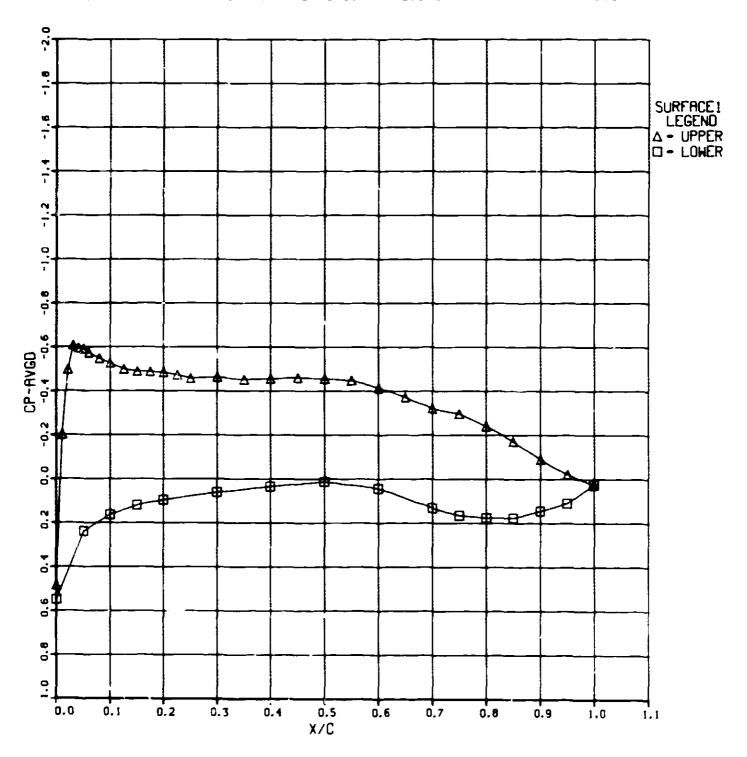


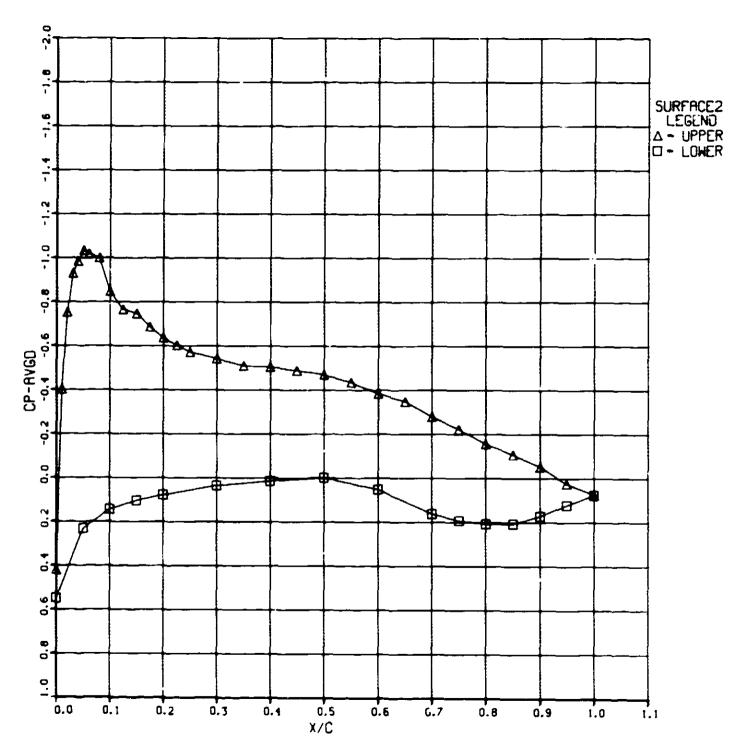


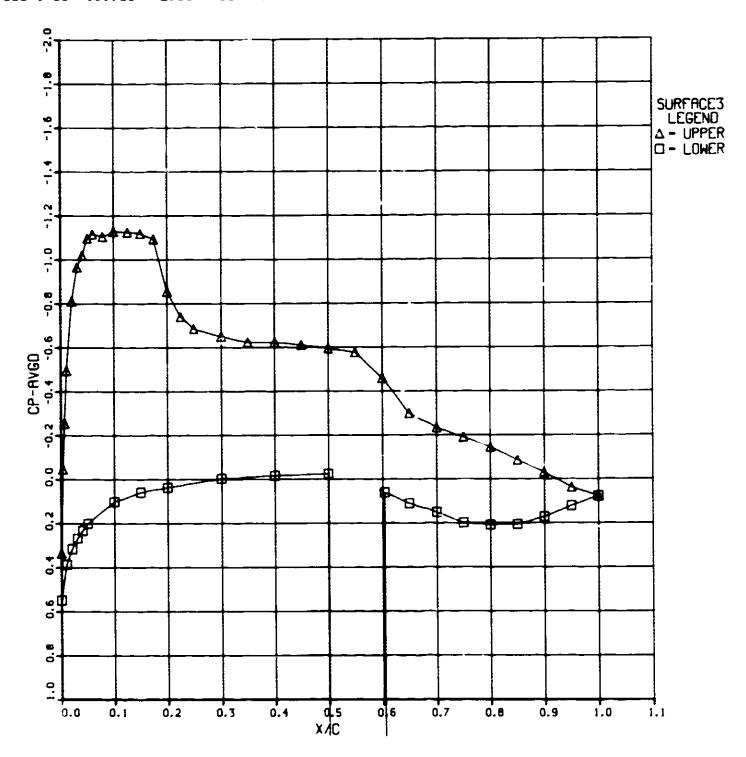


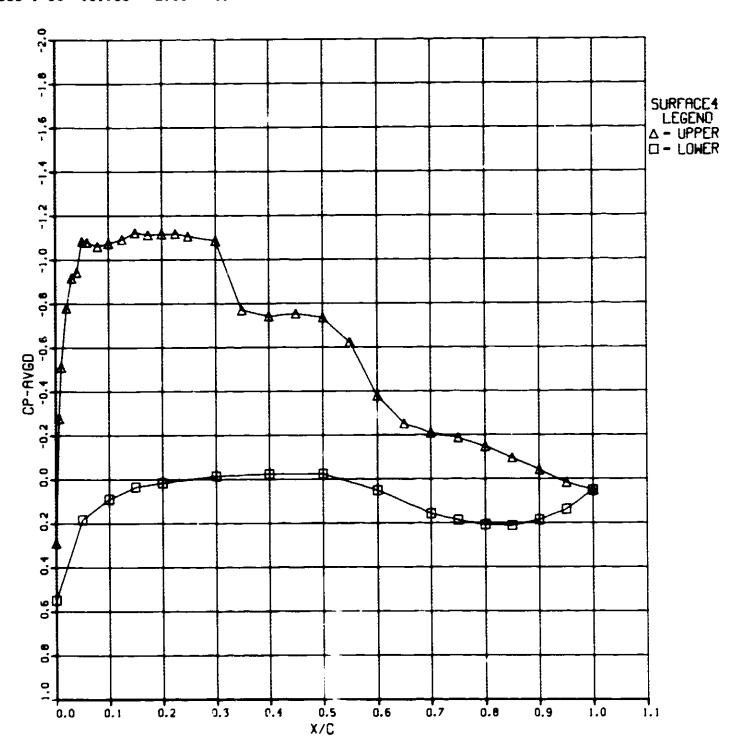


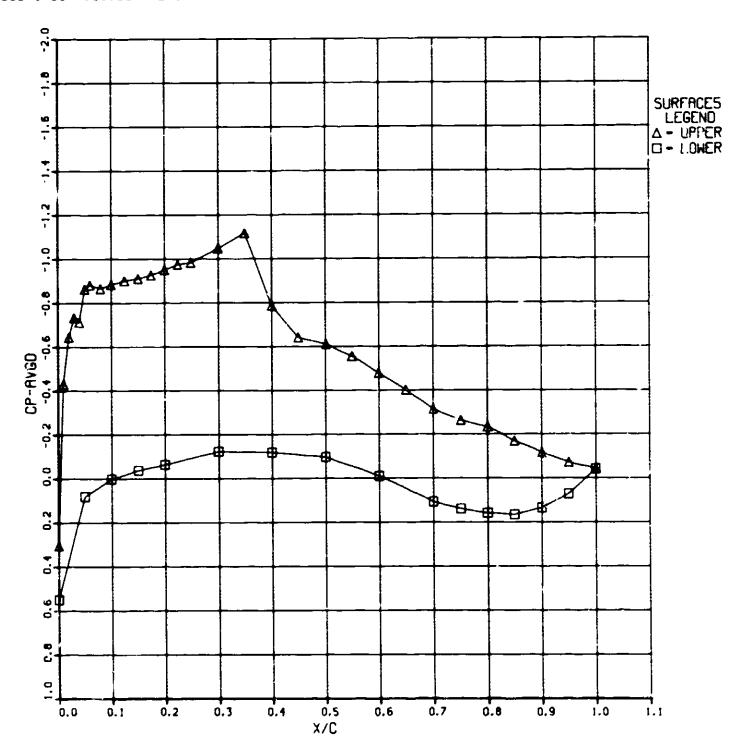


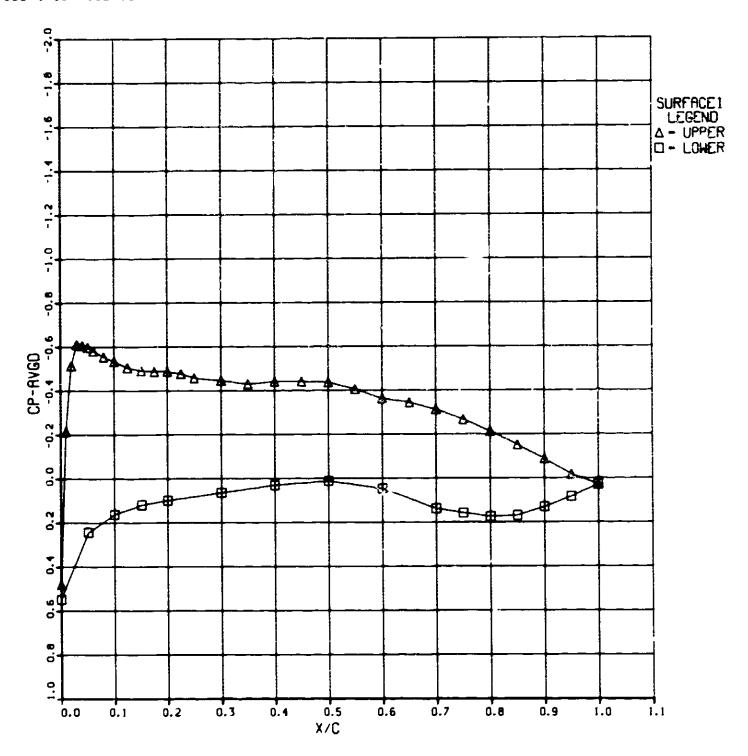


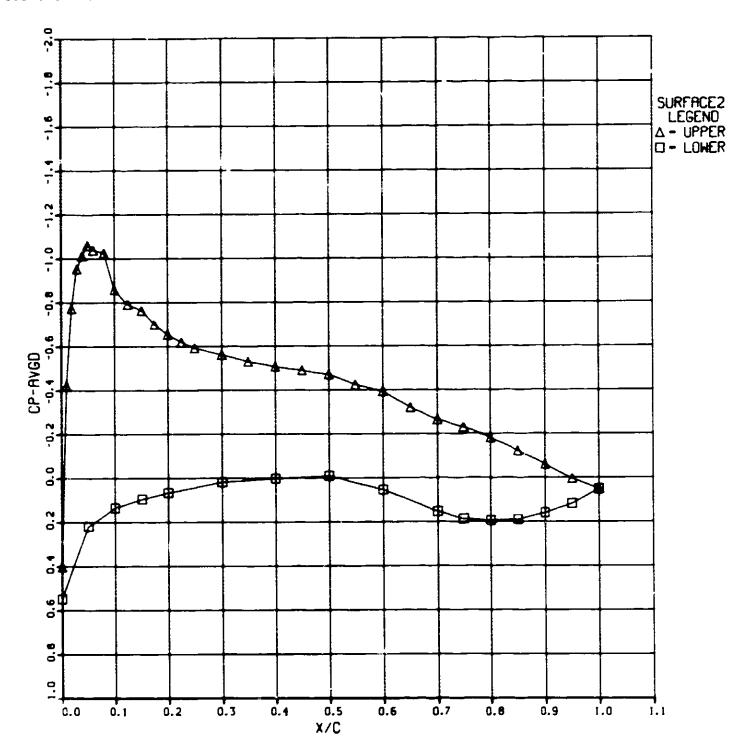


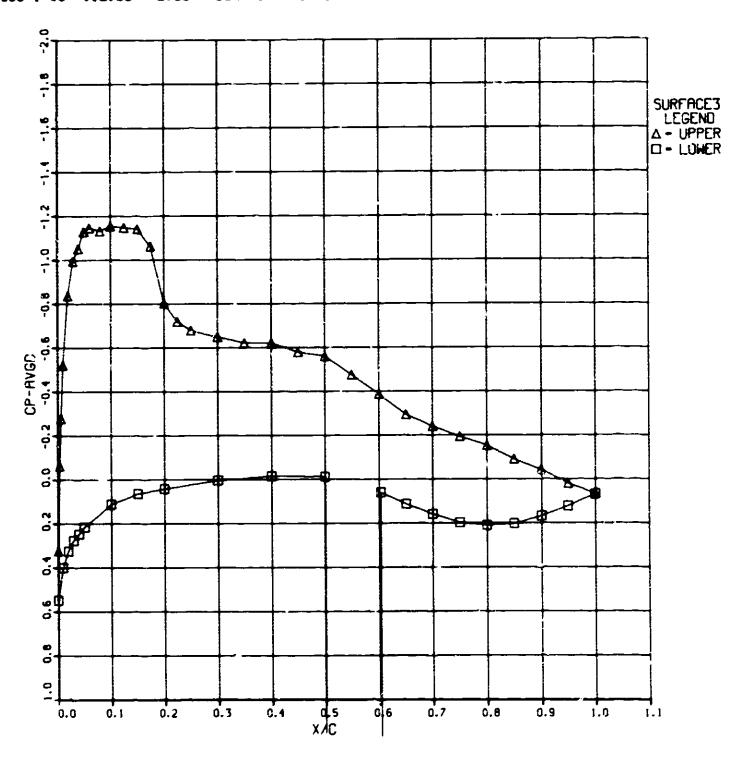


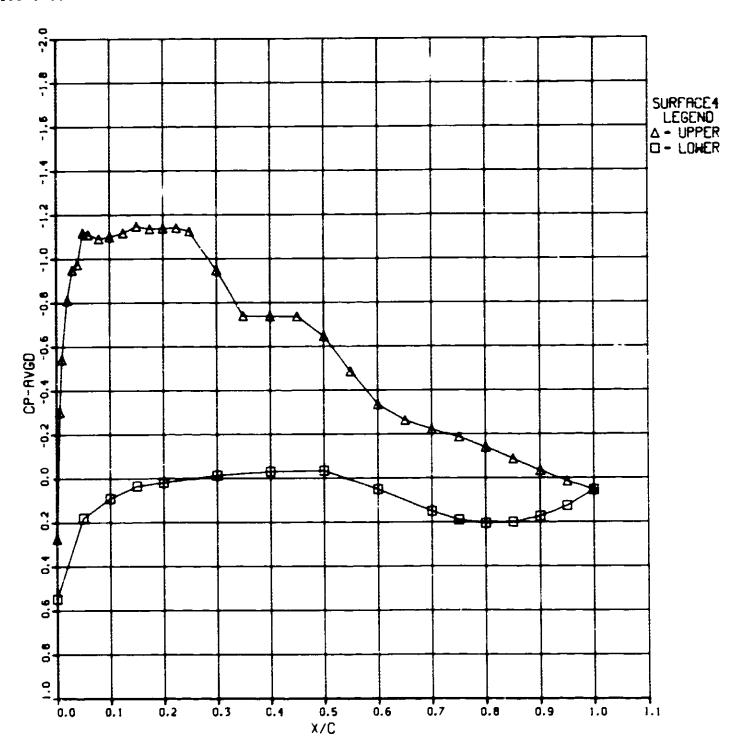


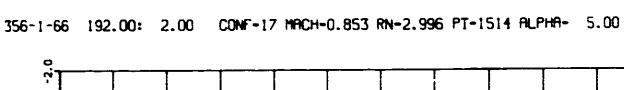


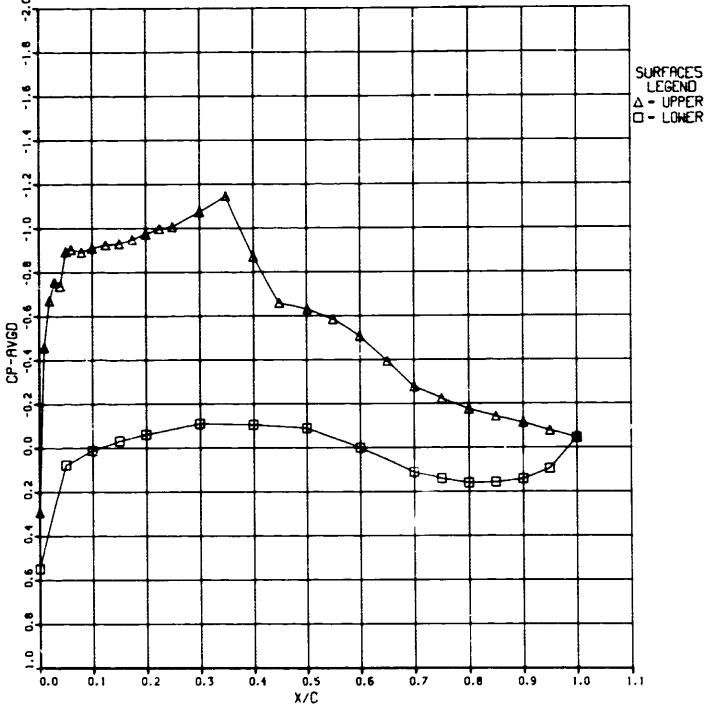


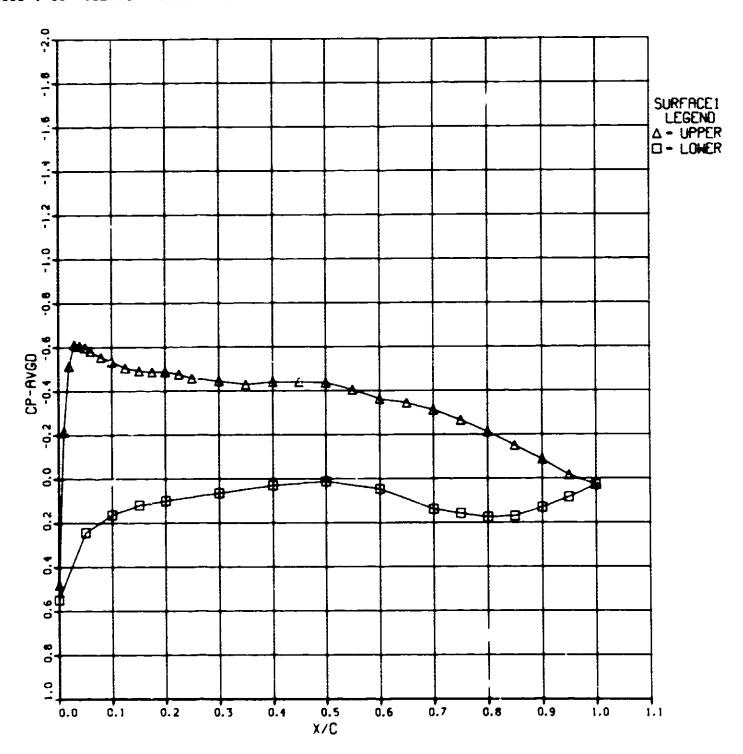


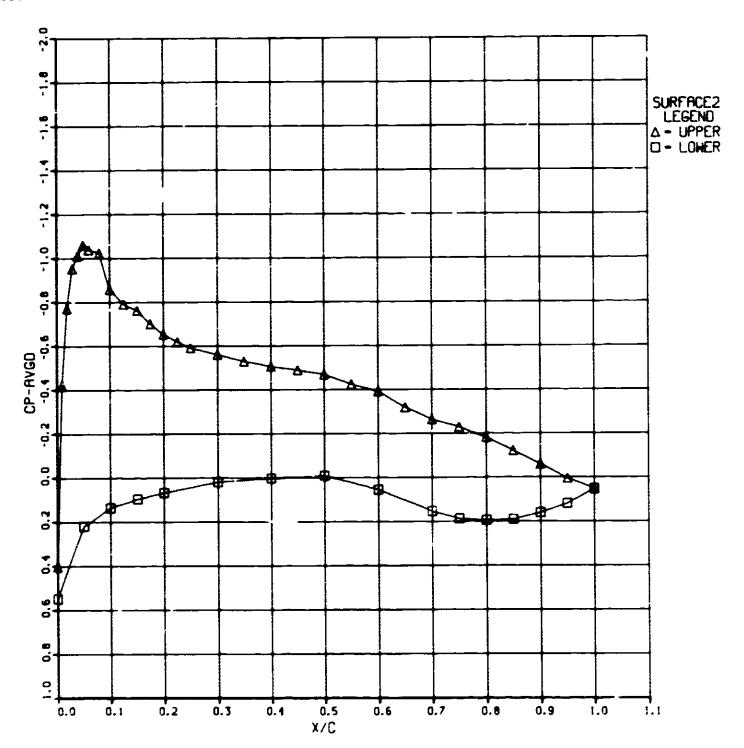


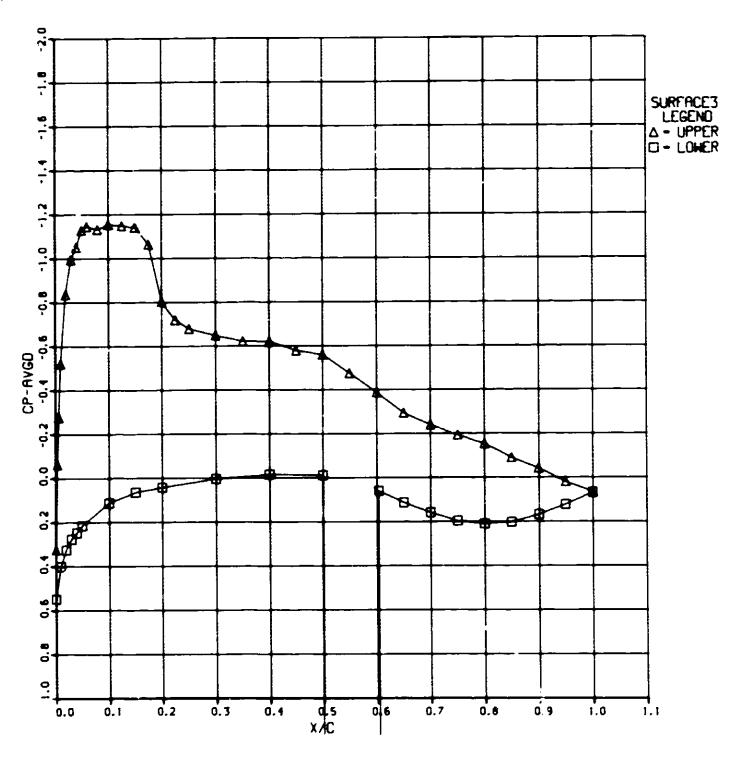


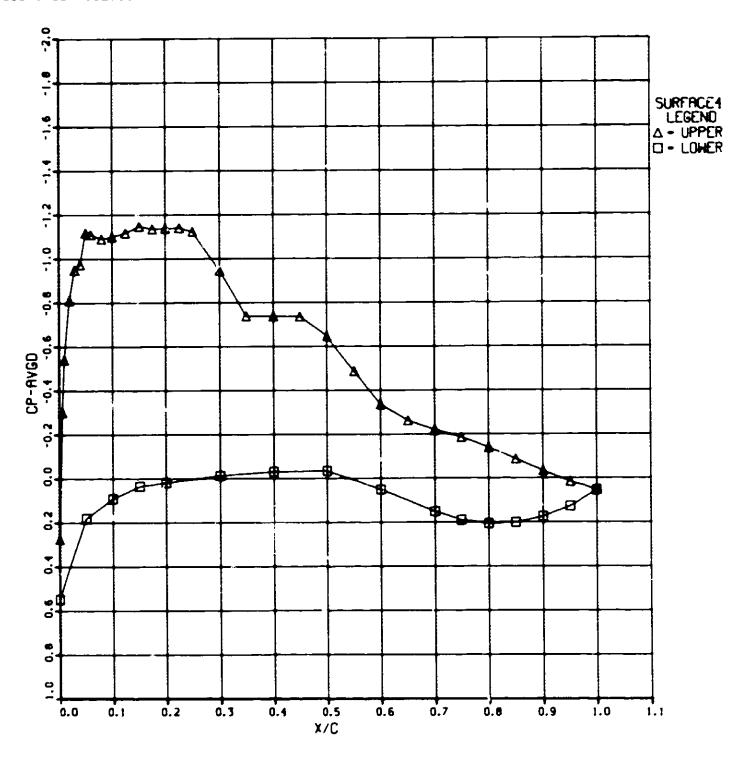


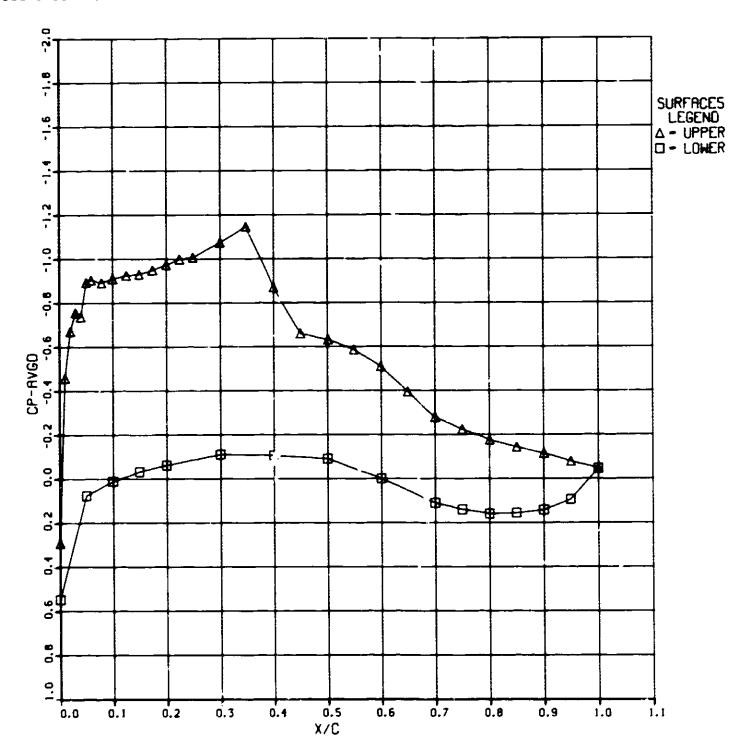


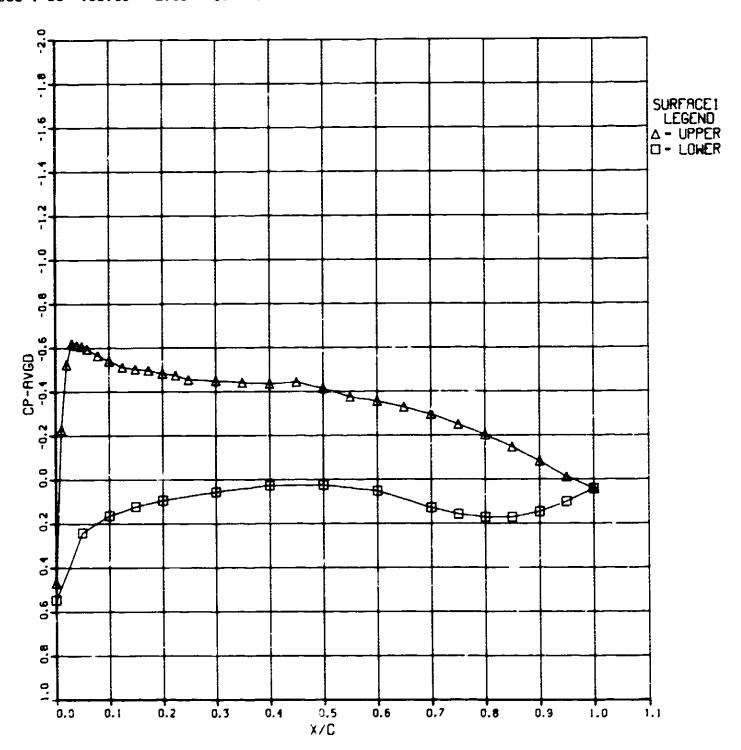


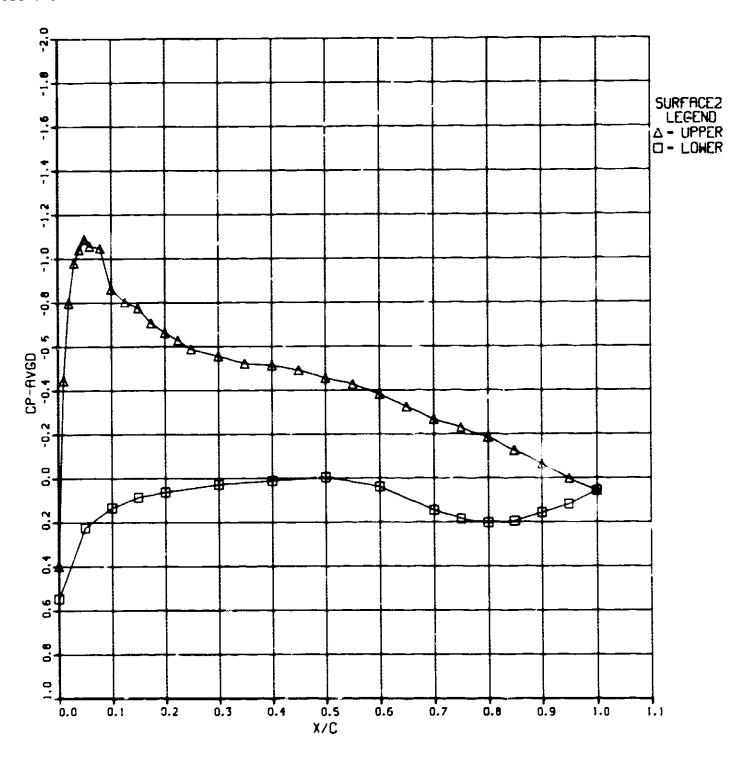


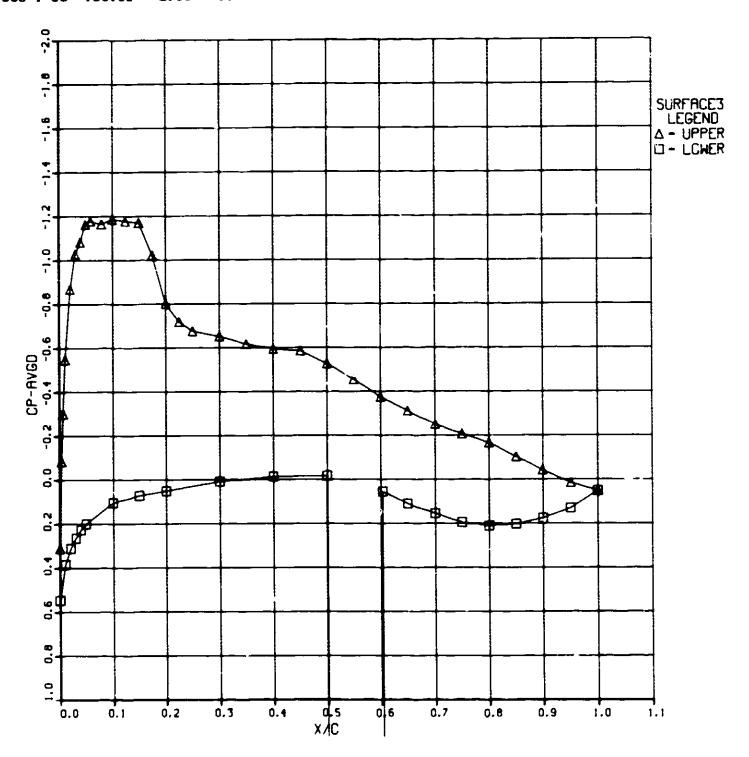


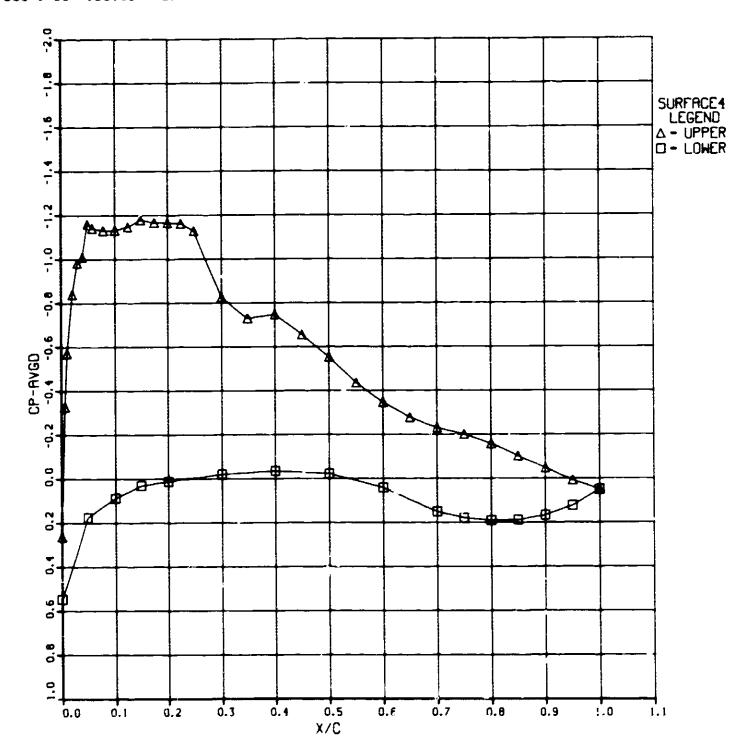


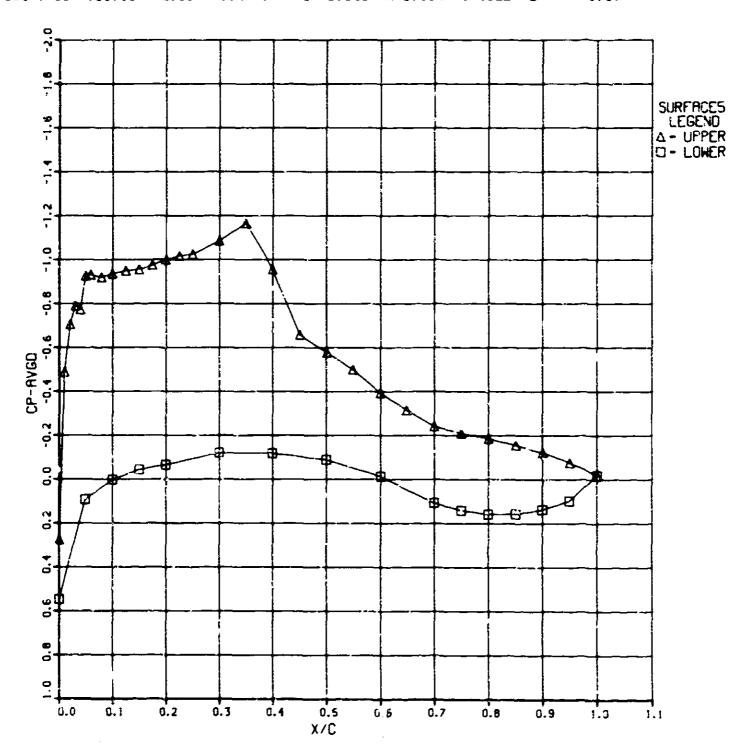




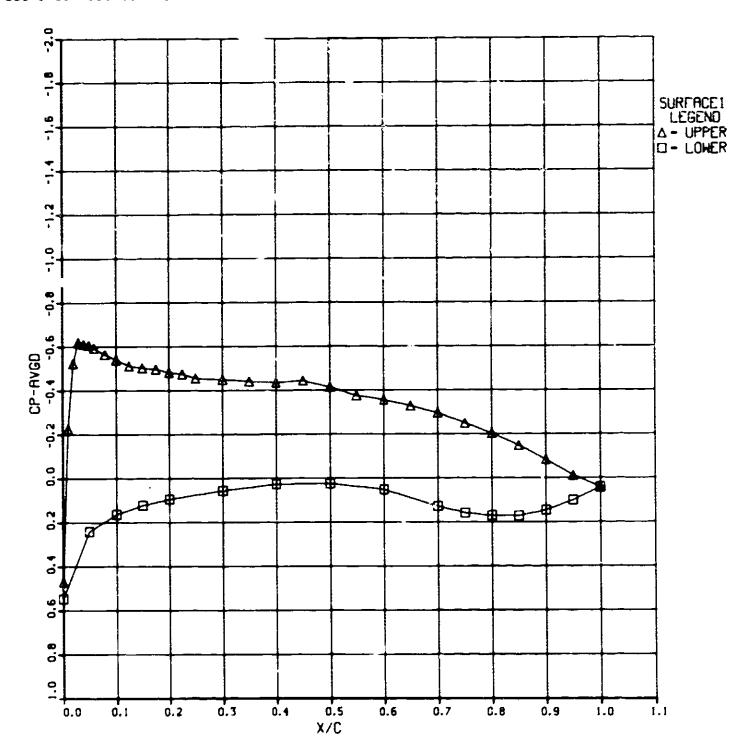


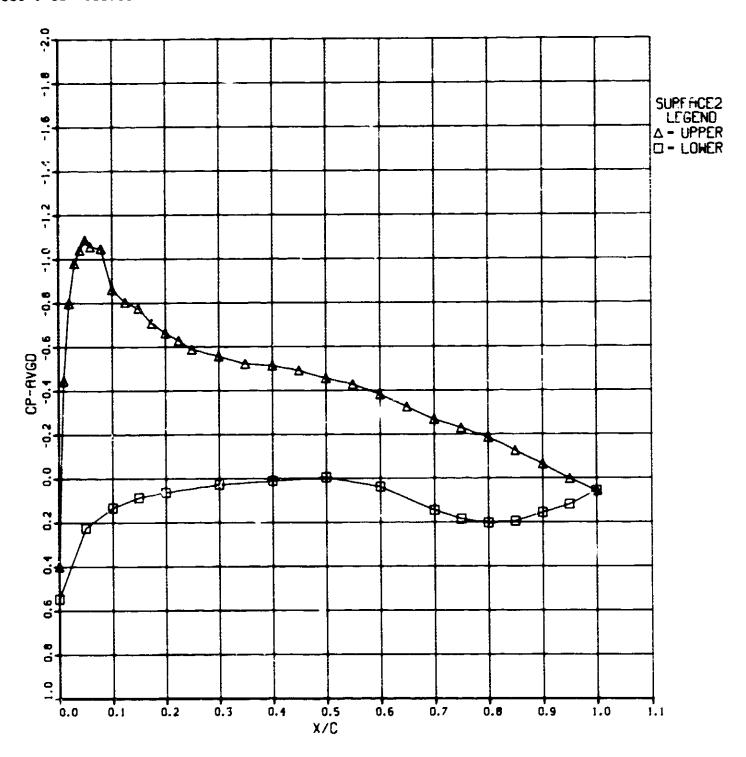


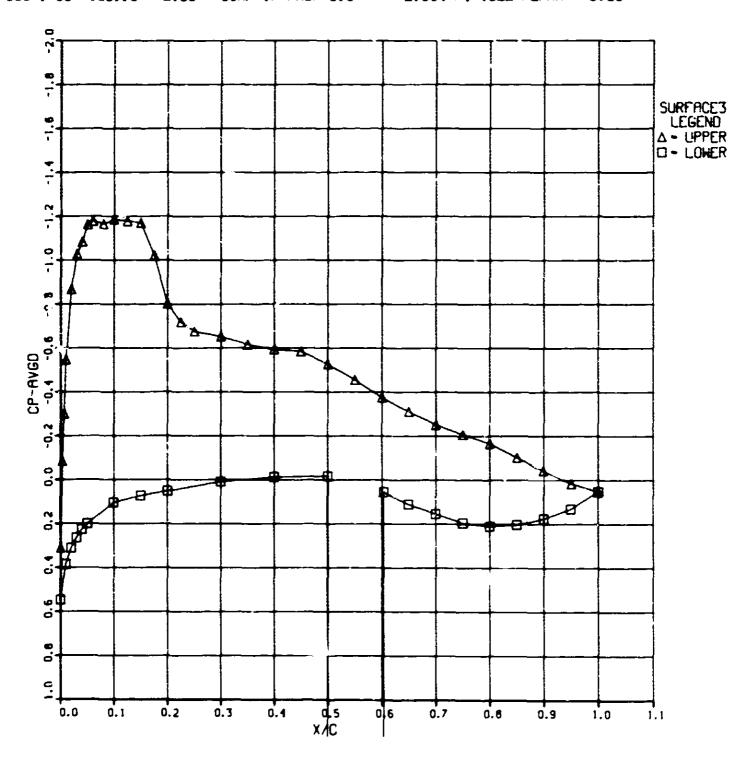


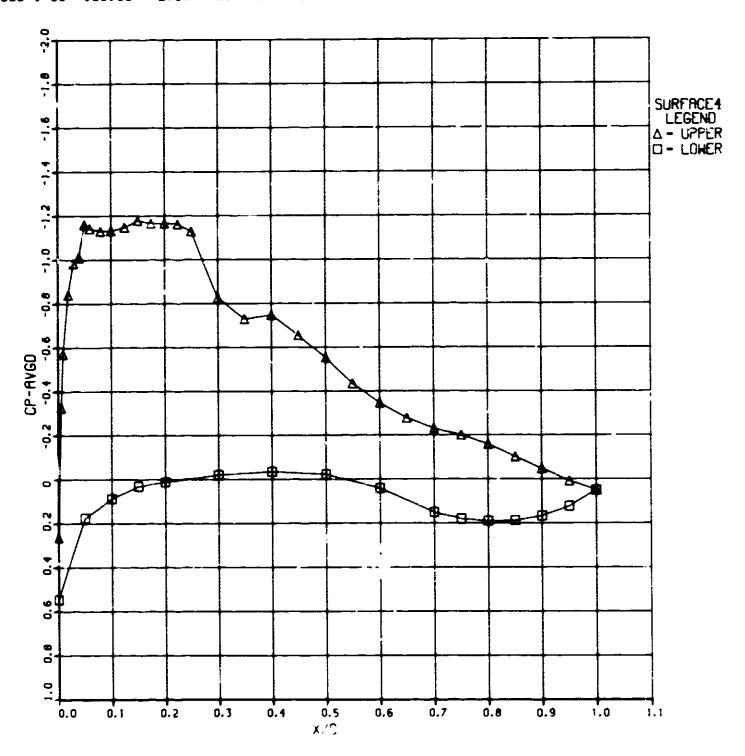


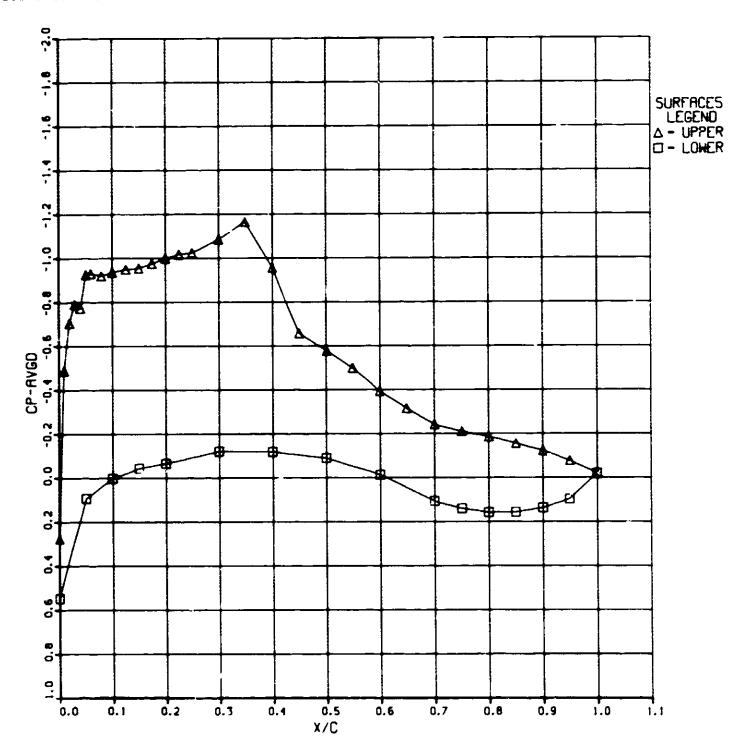
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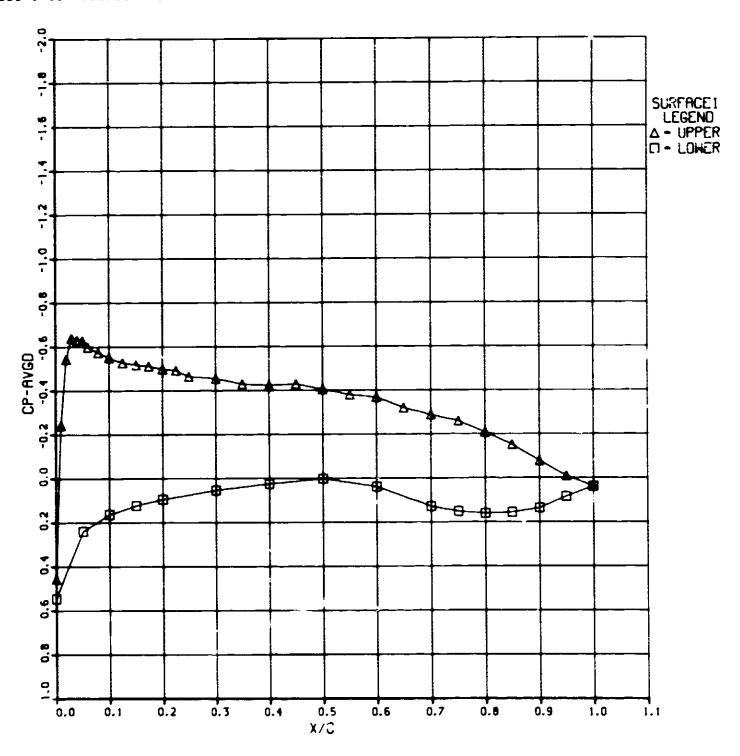


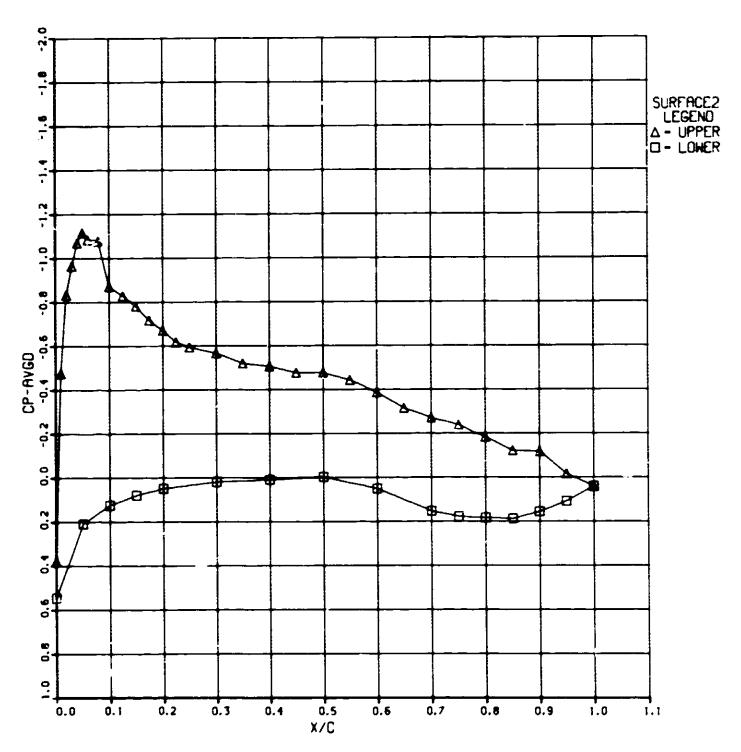


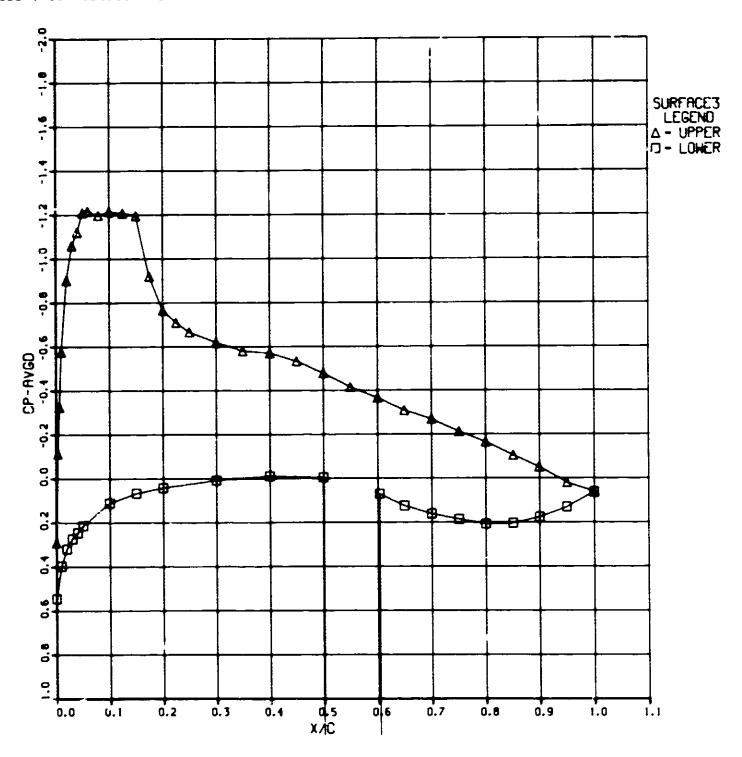


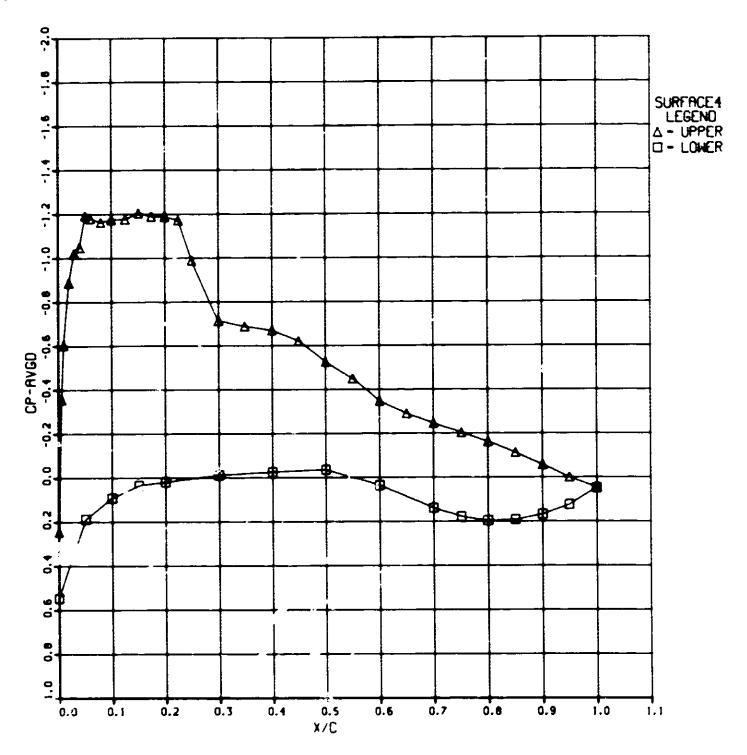




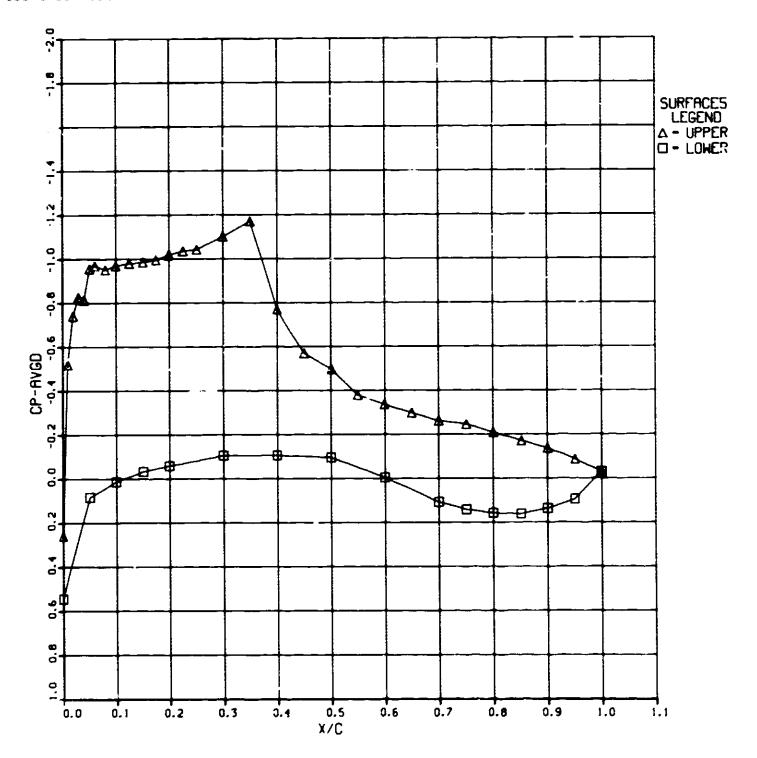


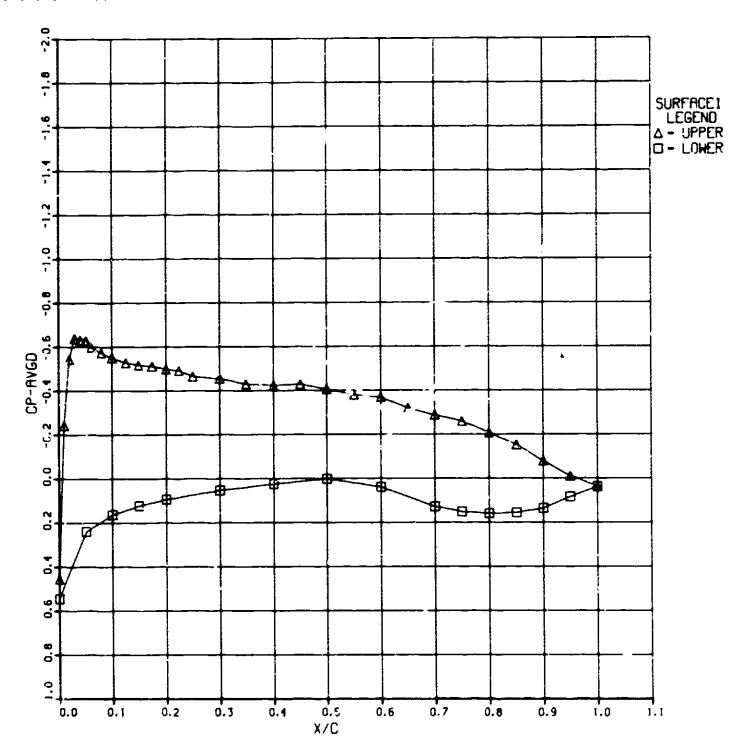


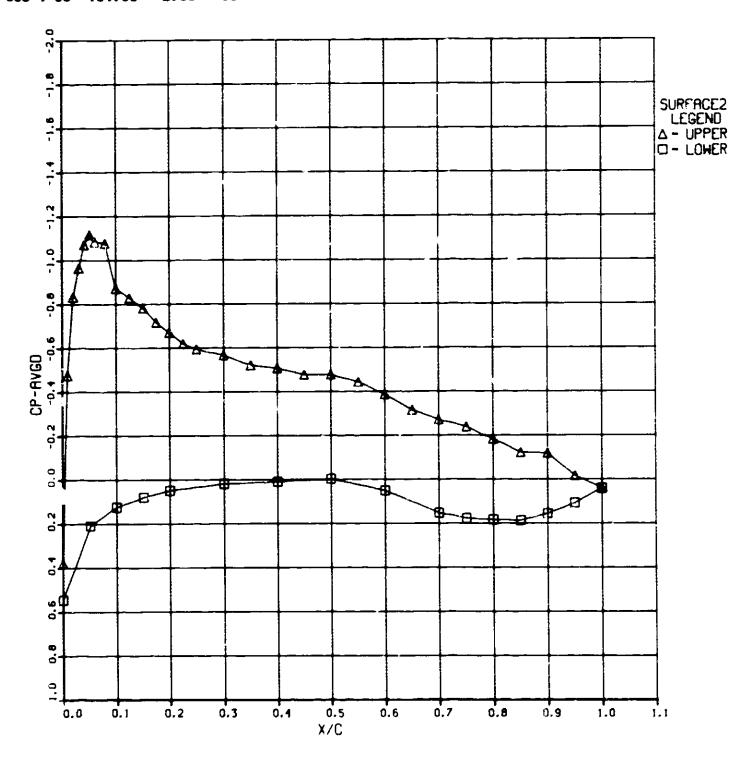


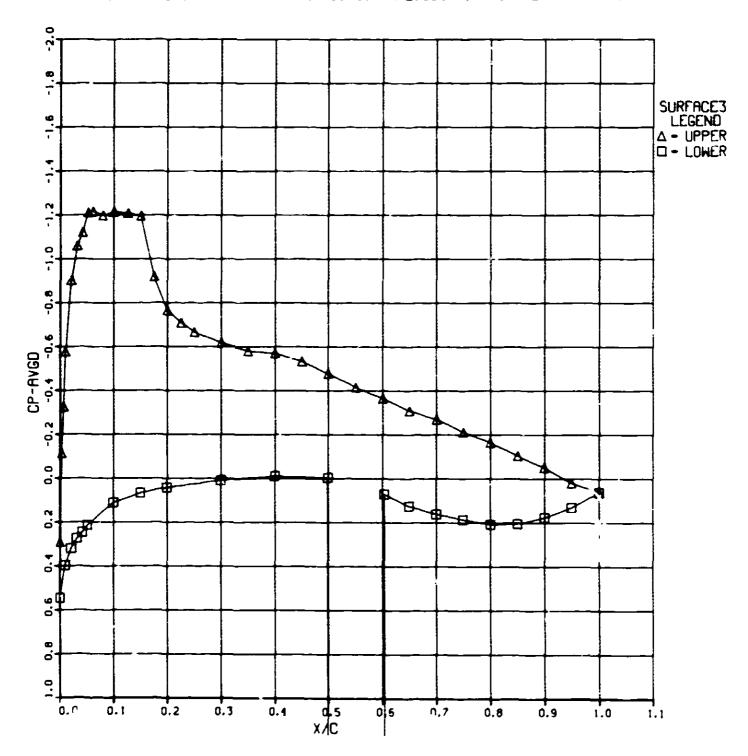


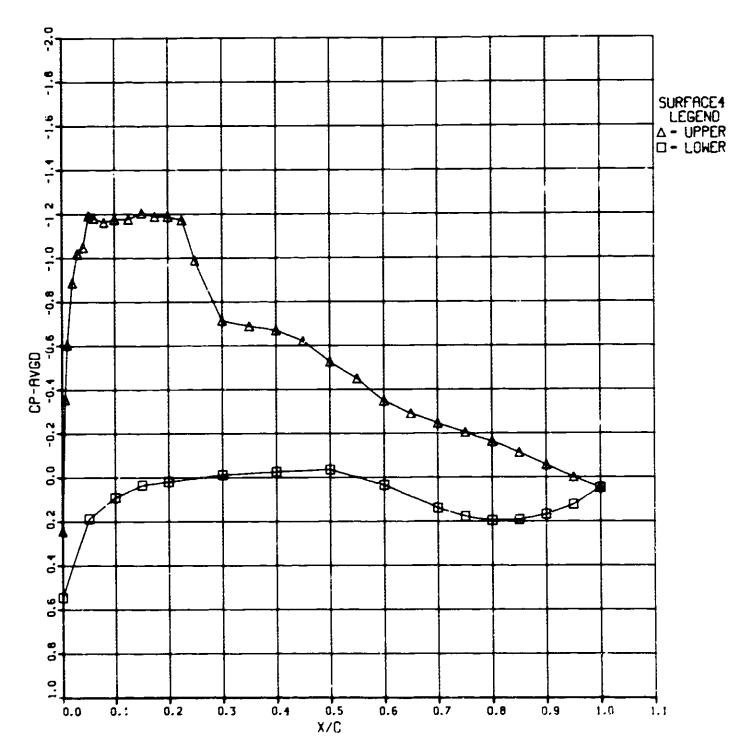
356-1-66 194.00: 2.00 CONF-17 MACH-0.833 RN-2.999 PT-1532 ALPHA- 5.00

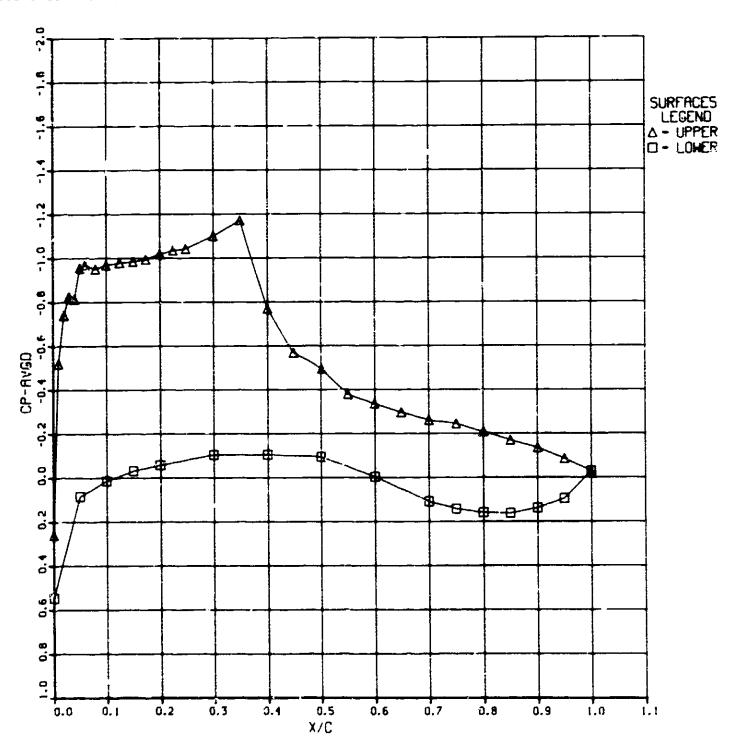


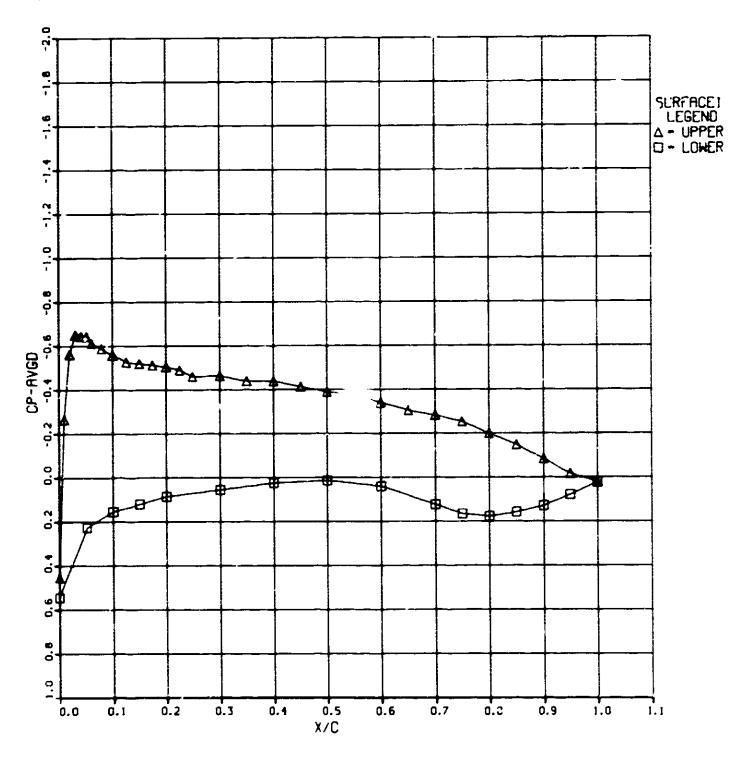


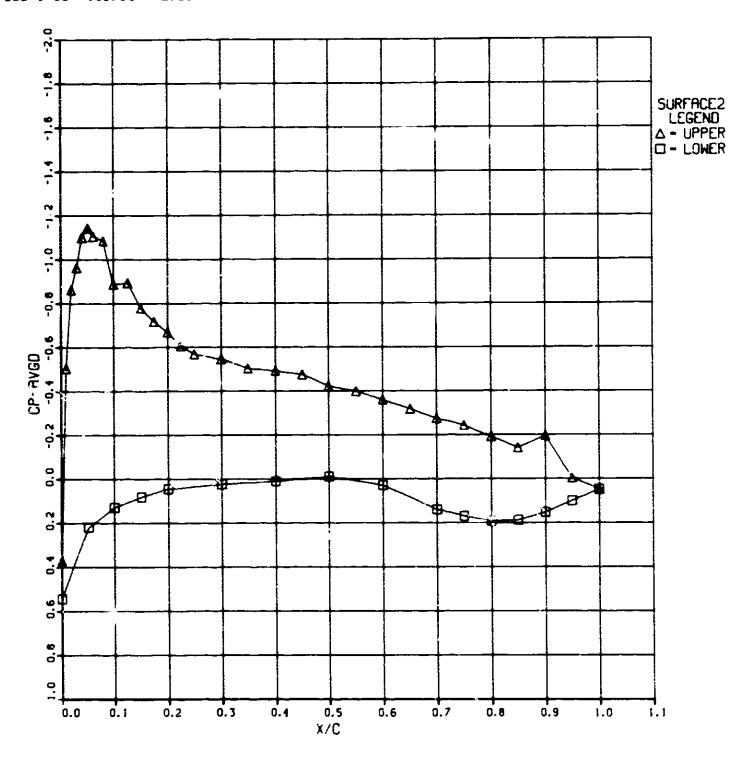


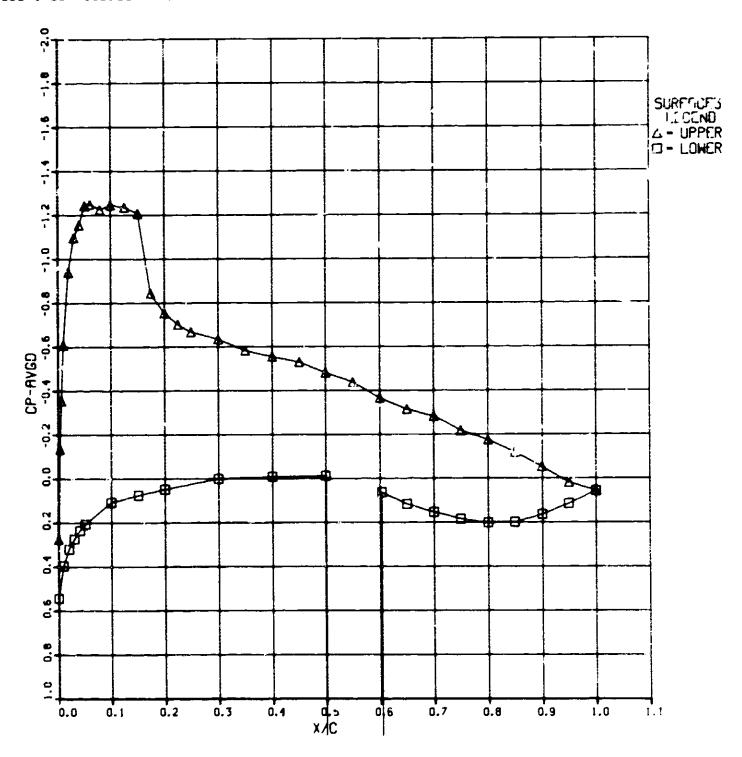


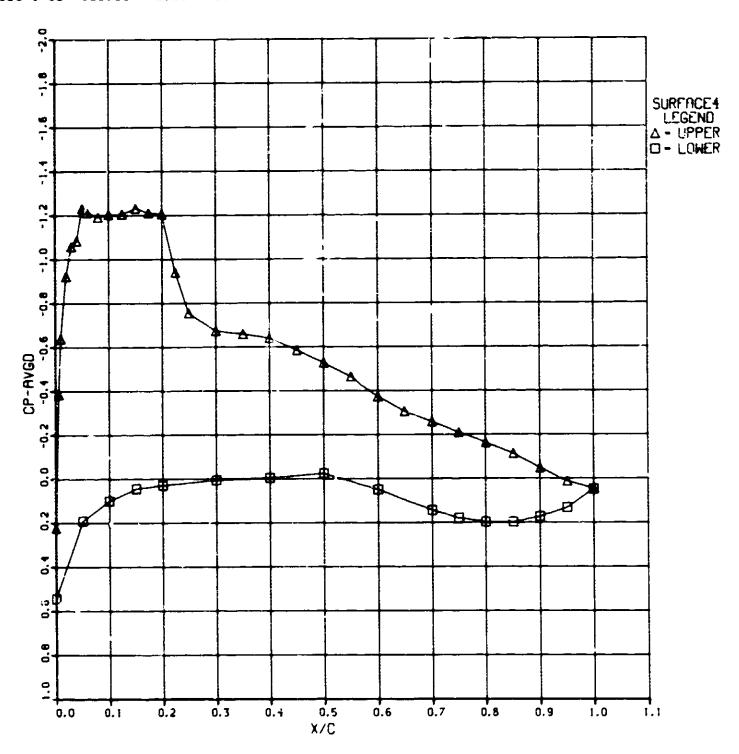


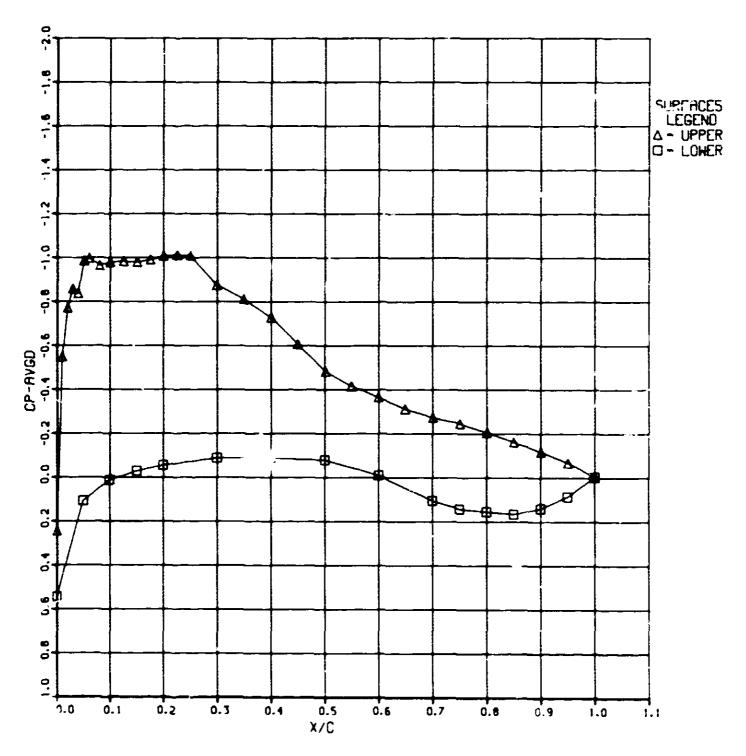


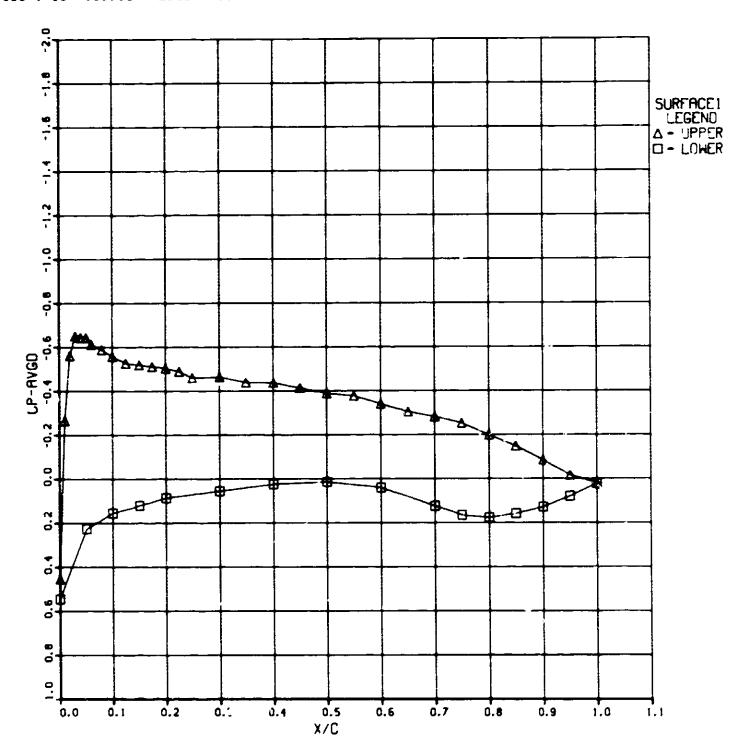


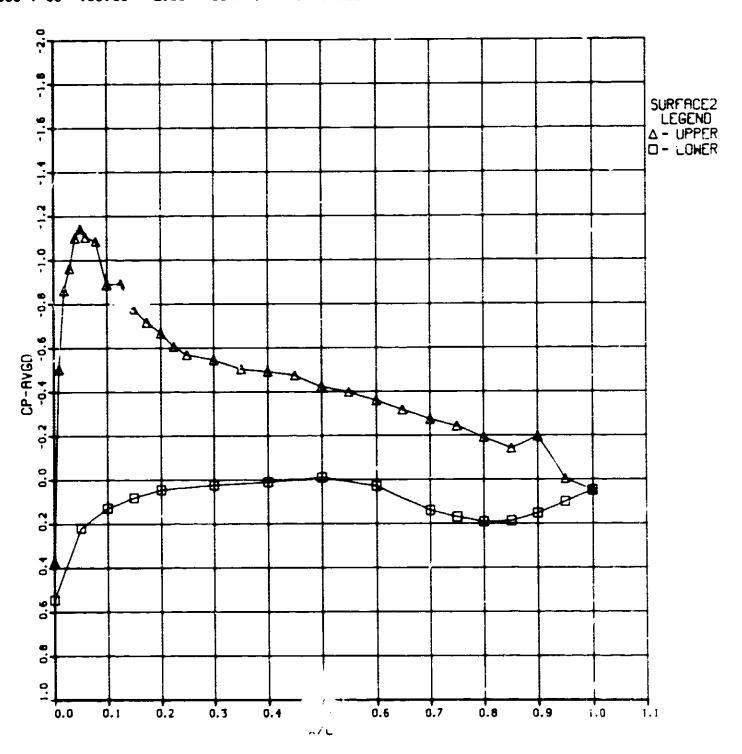


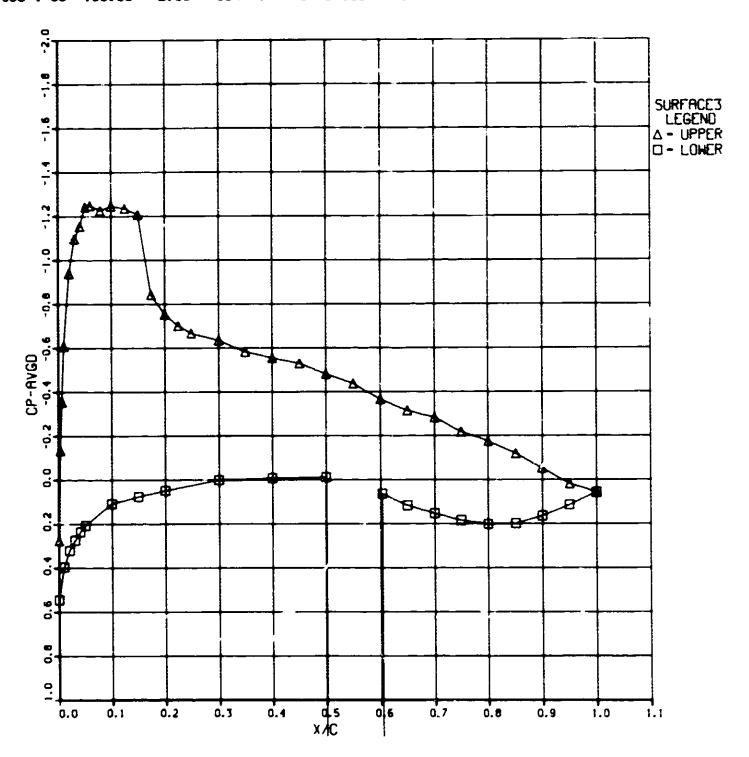


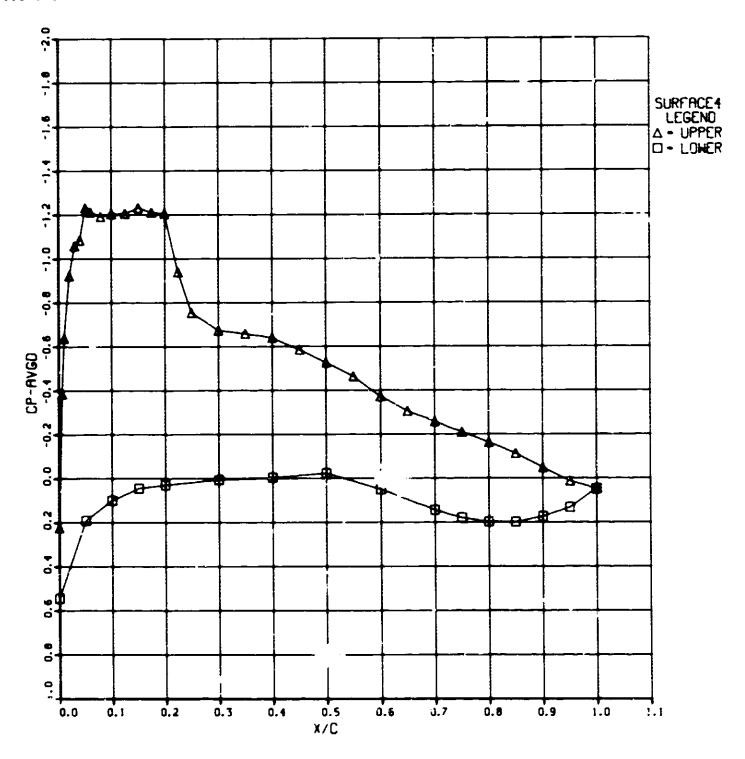


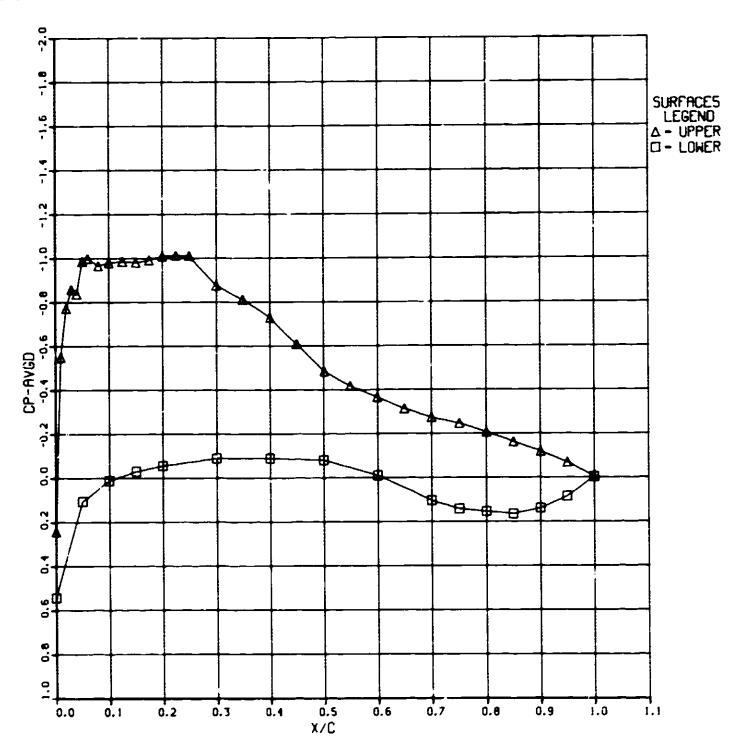


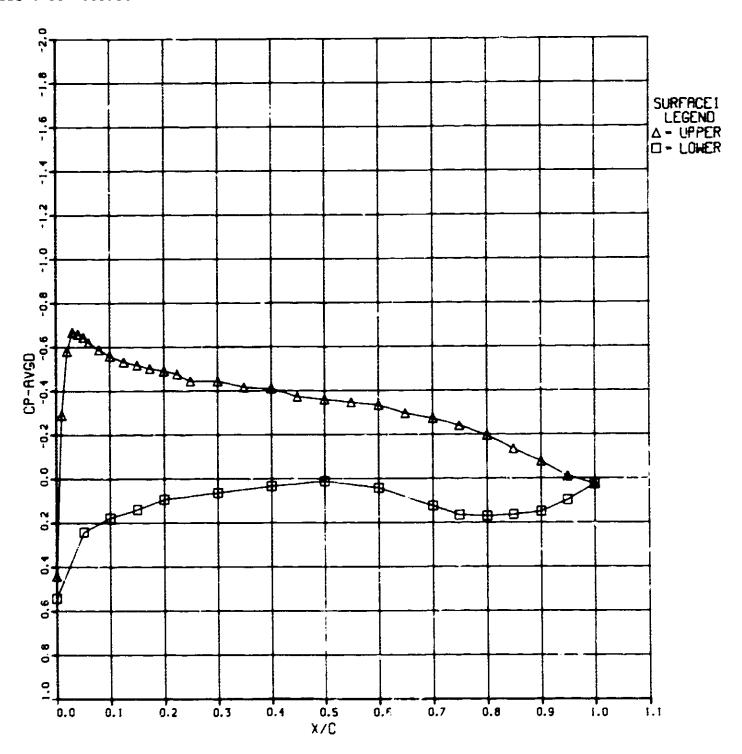


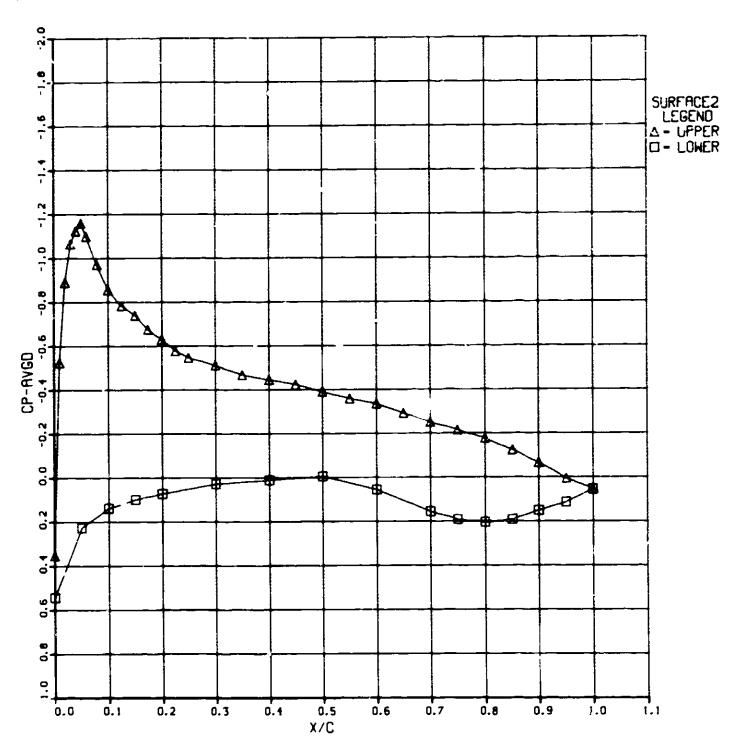


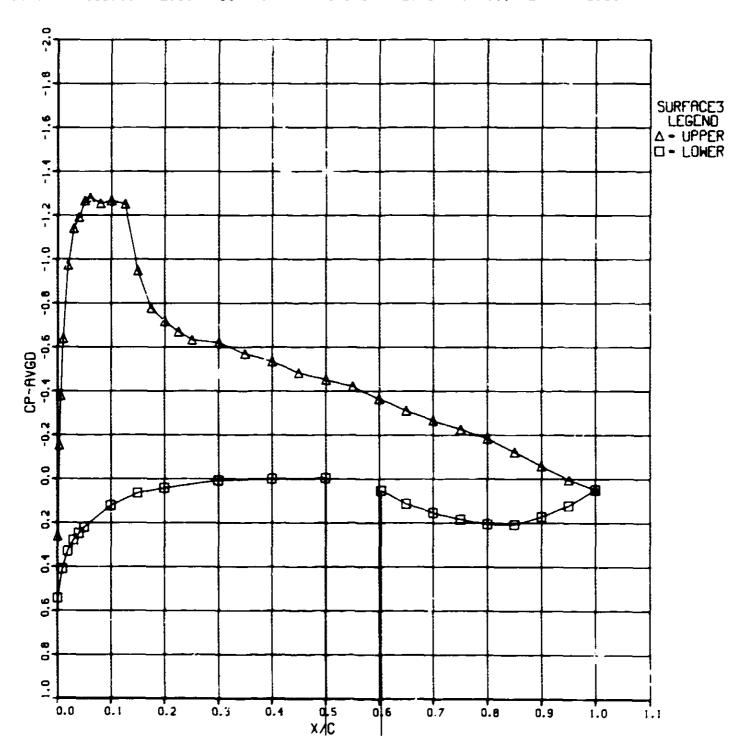


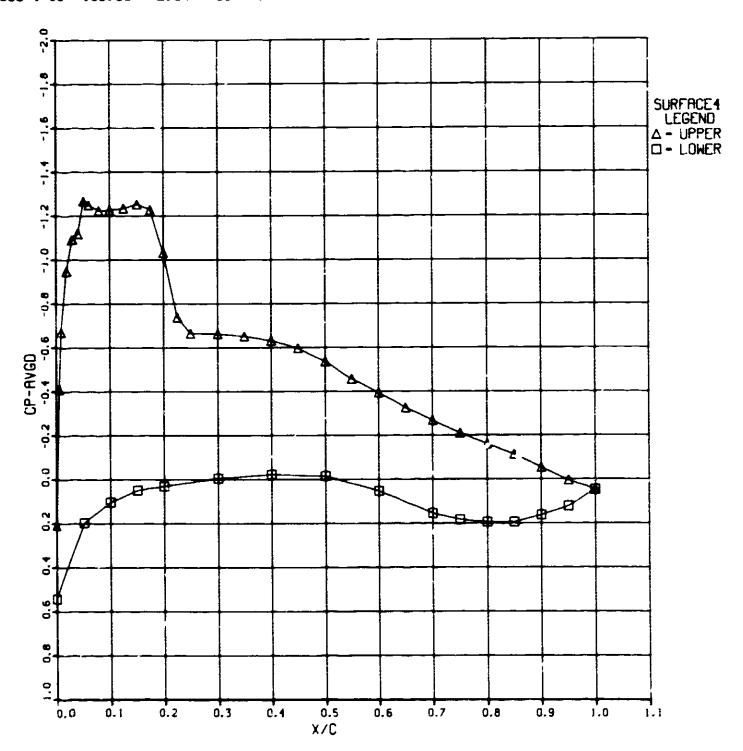


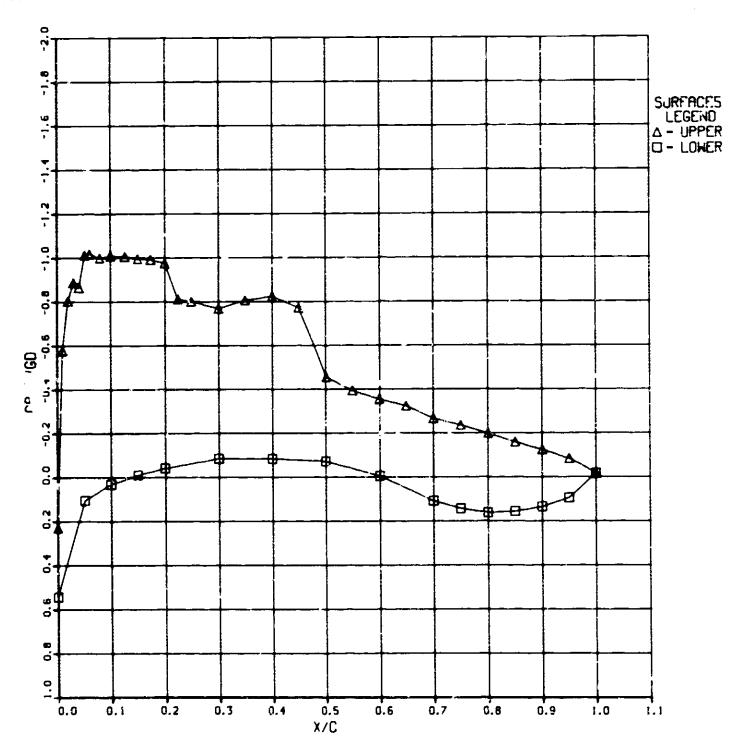


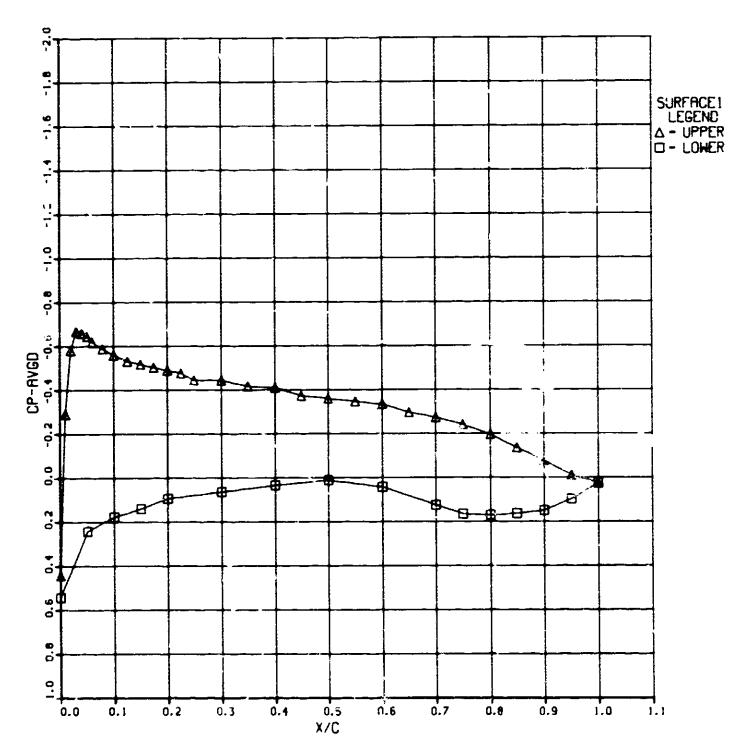


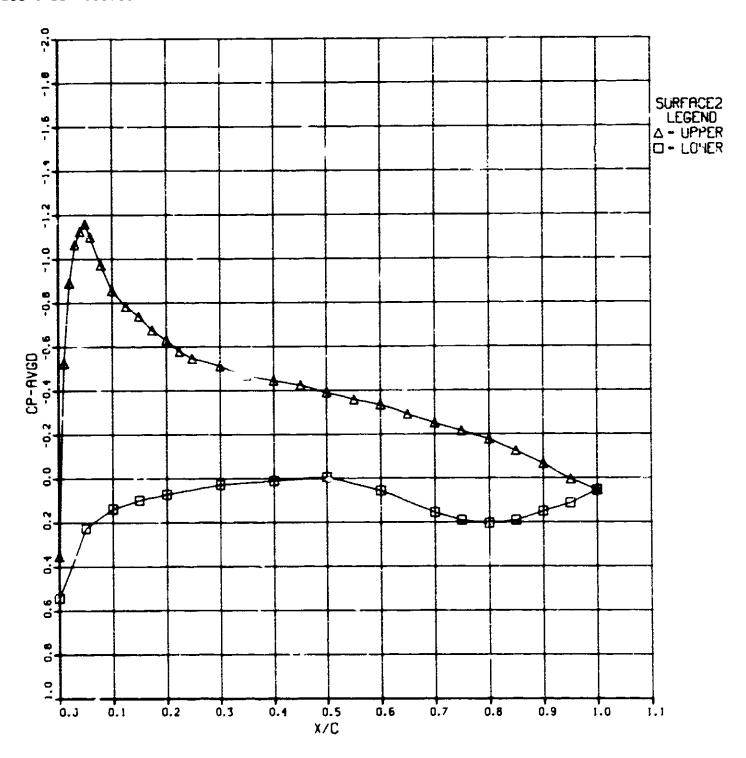


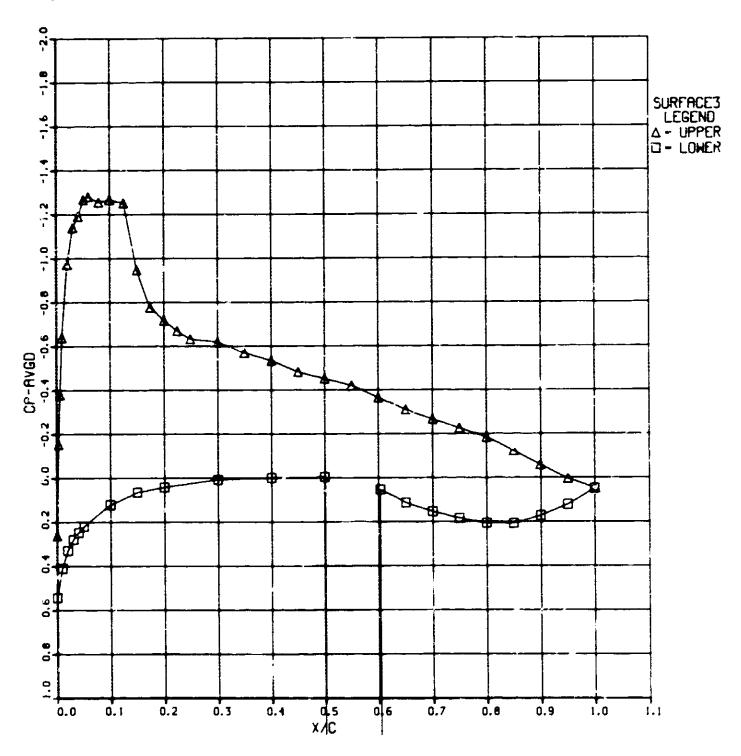


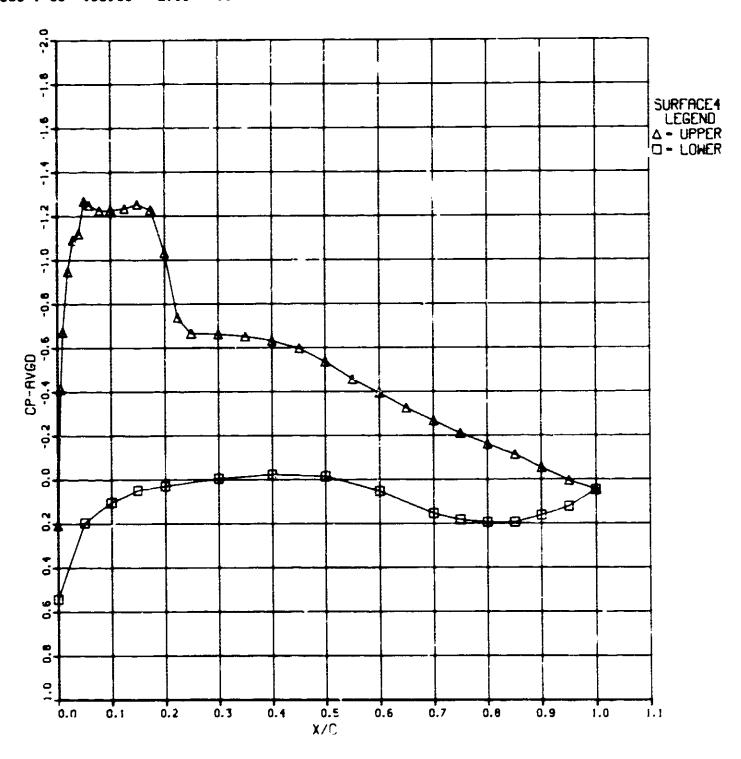


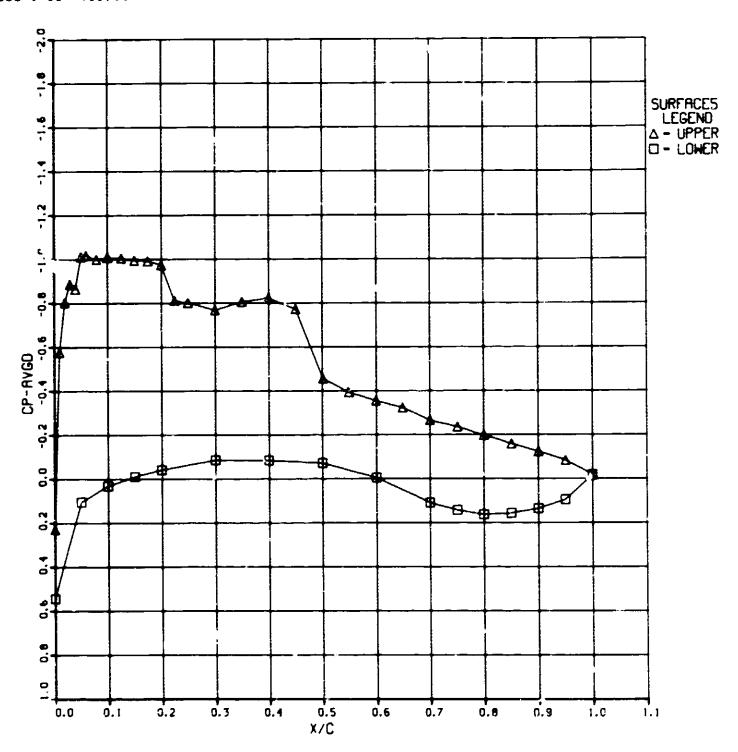


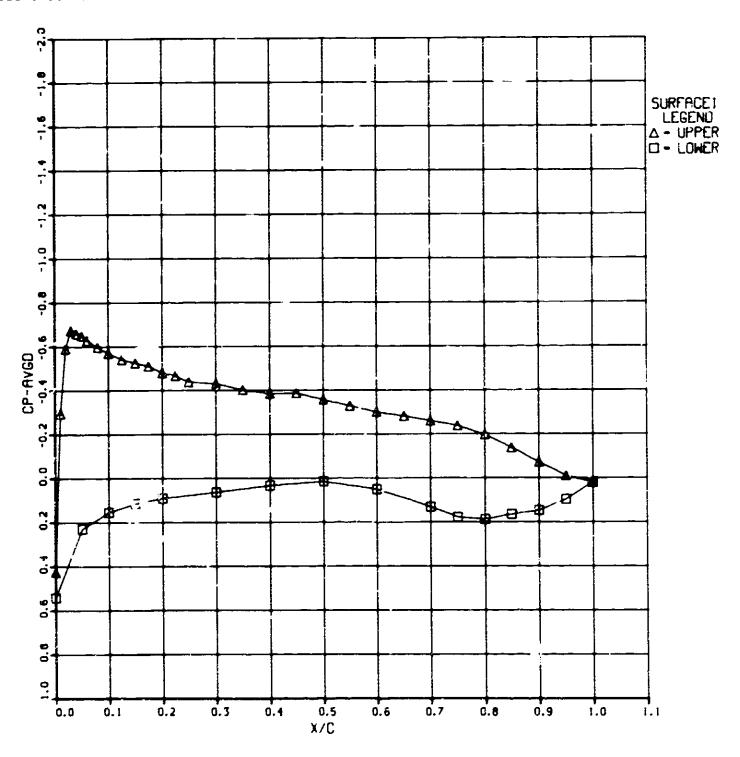


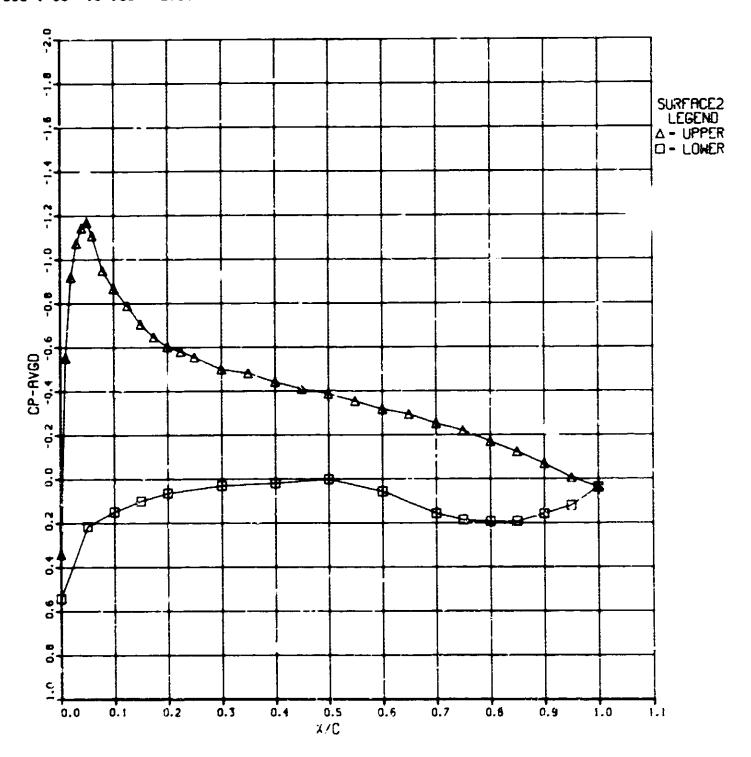


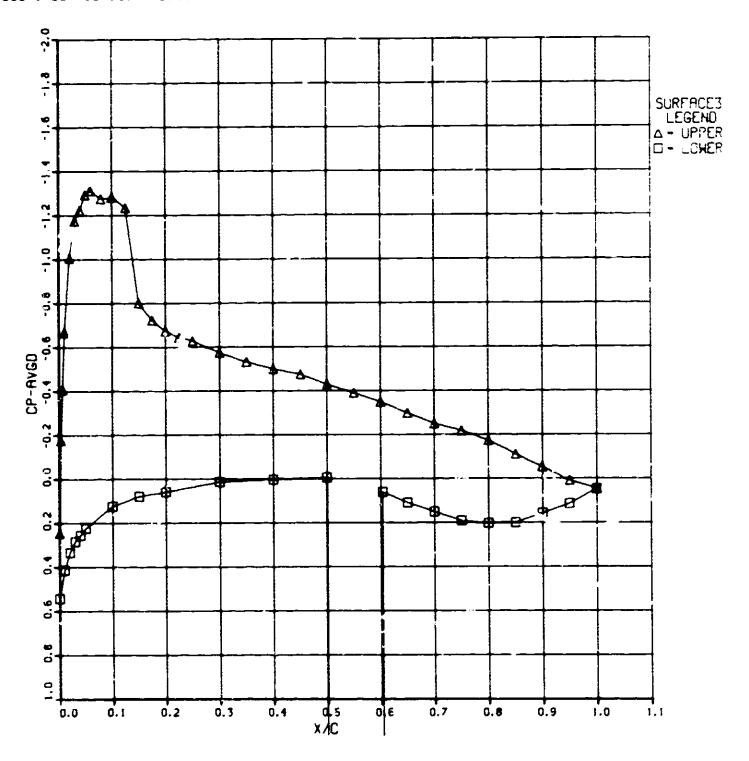


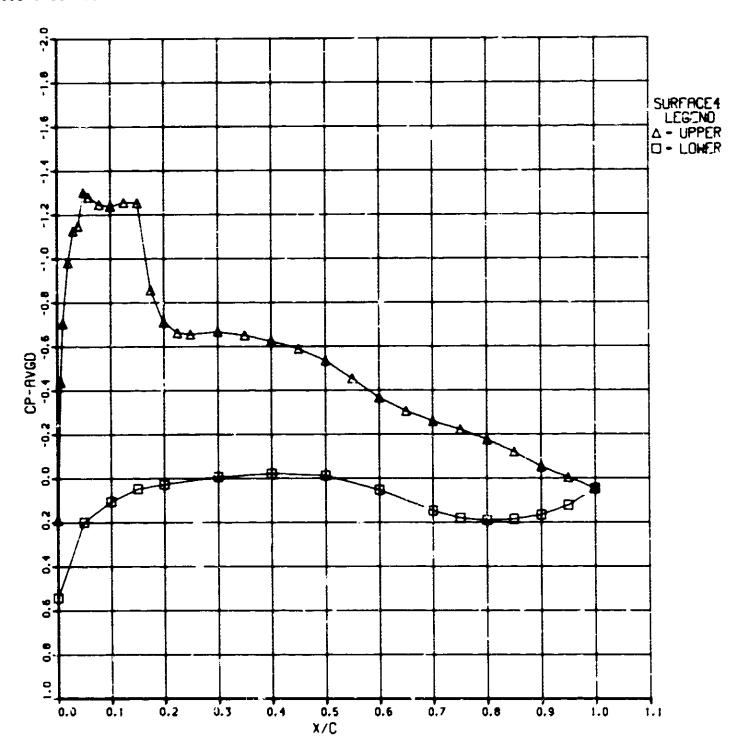


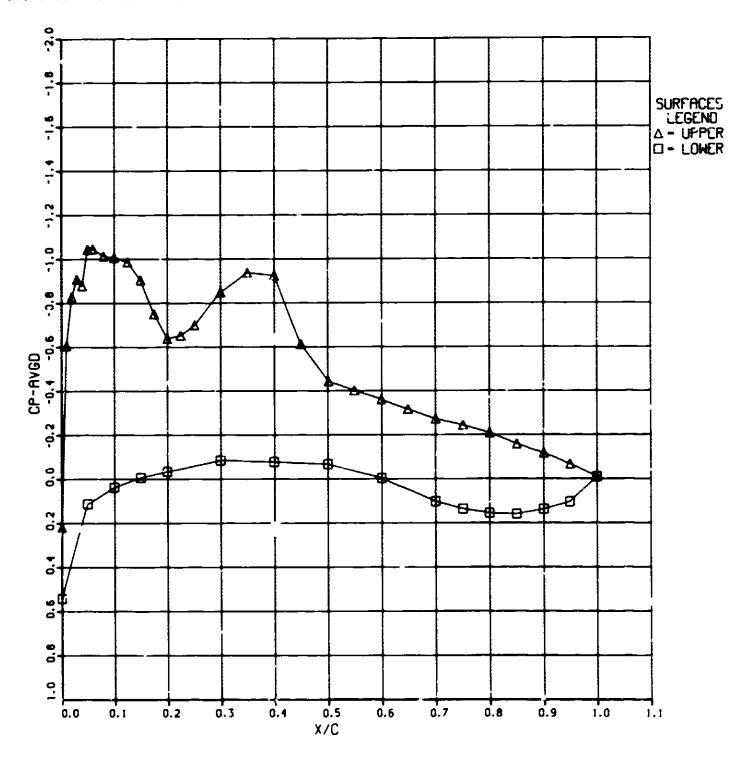


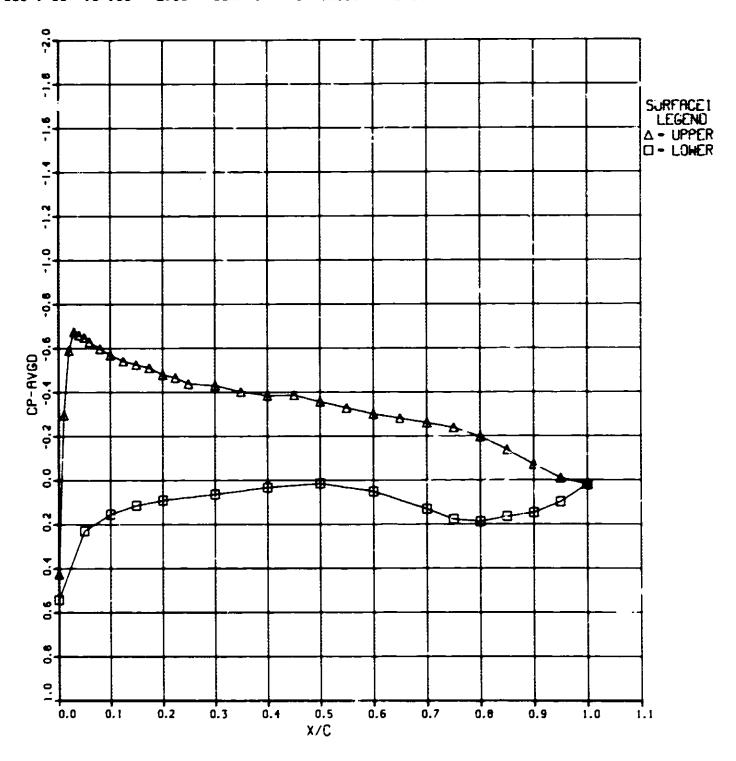


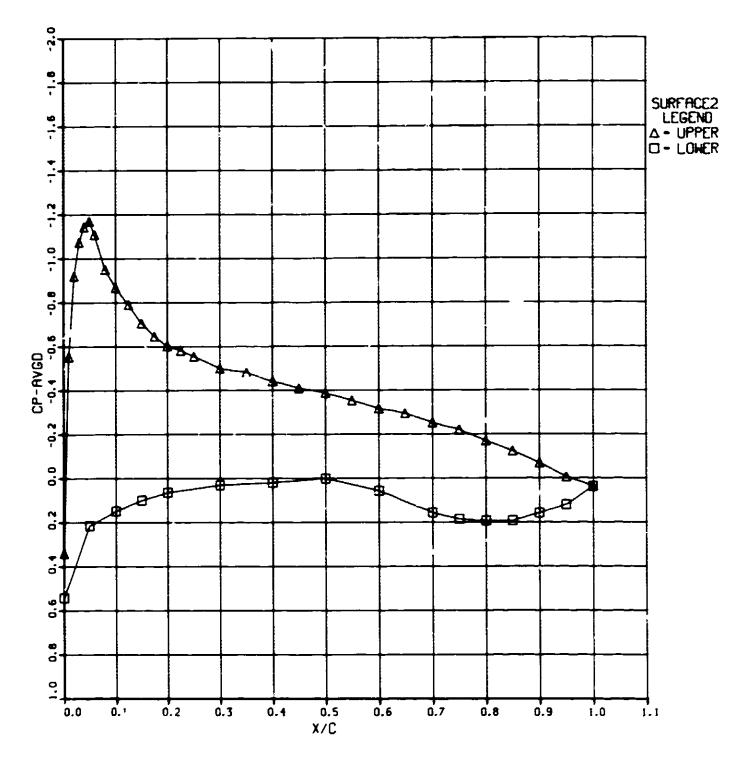


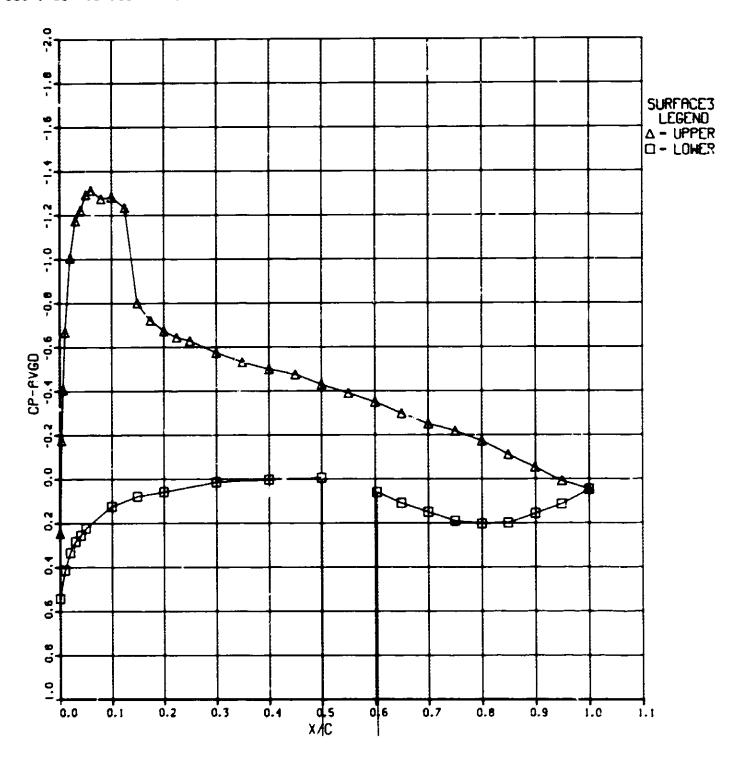


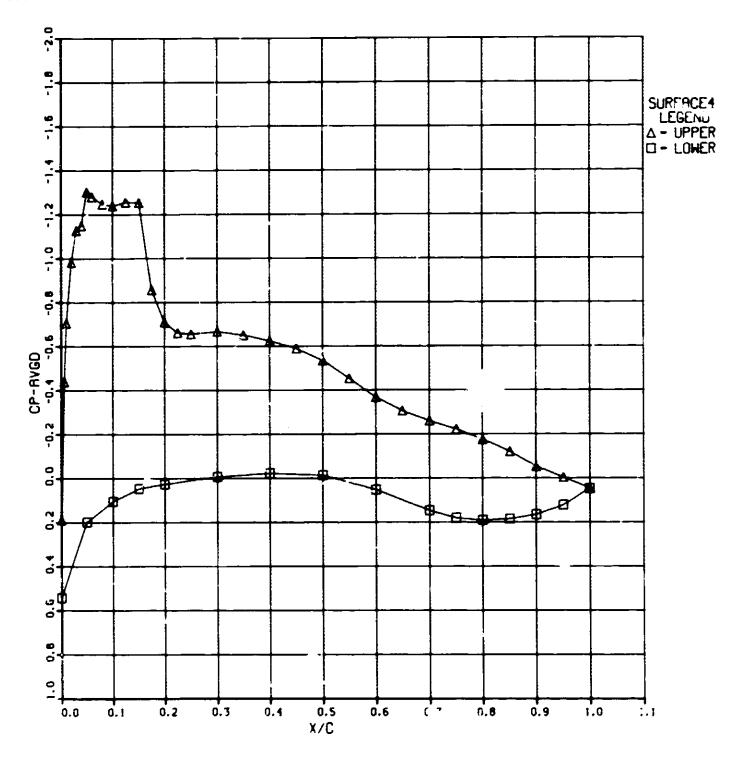


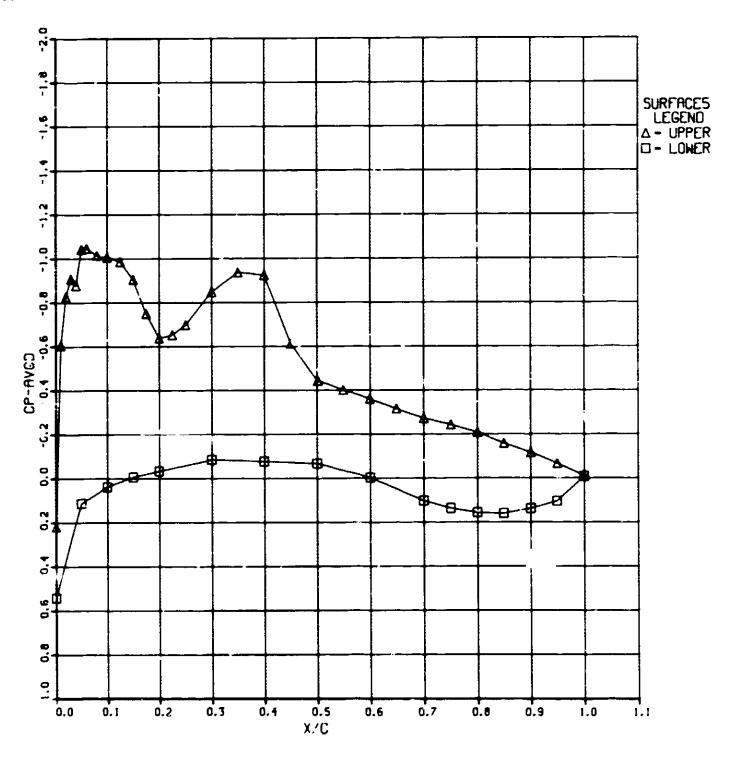


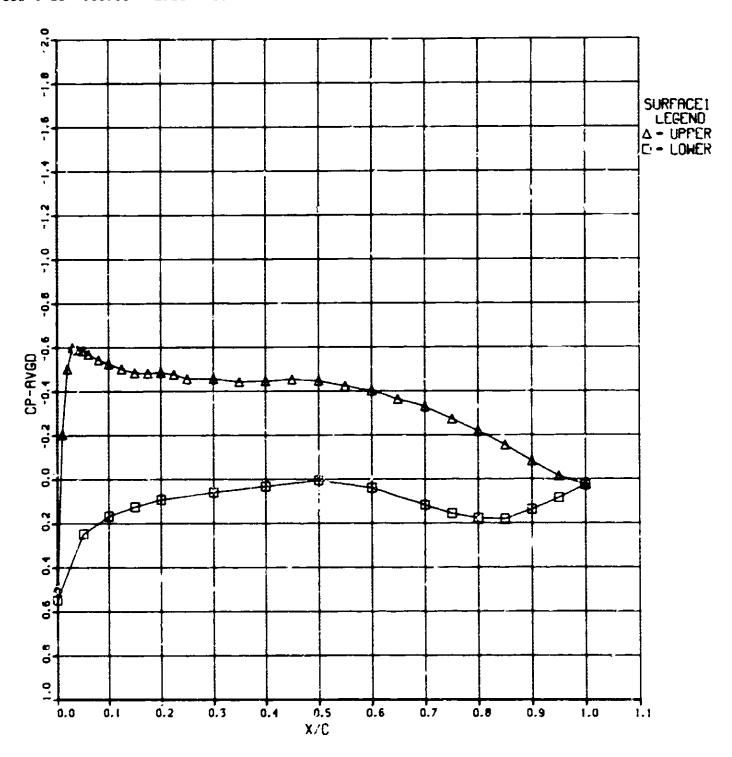


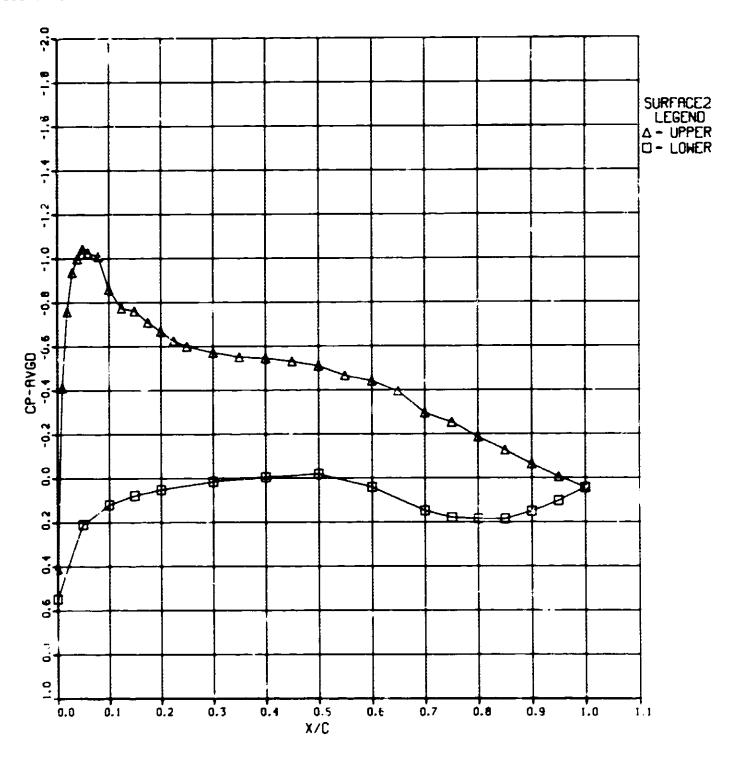


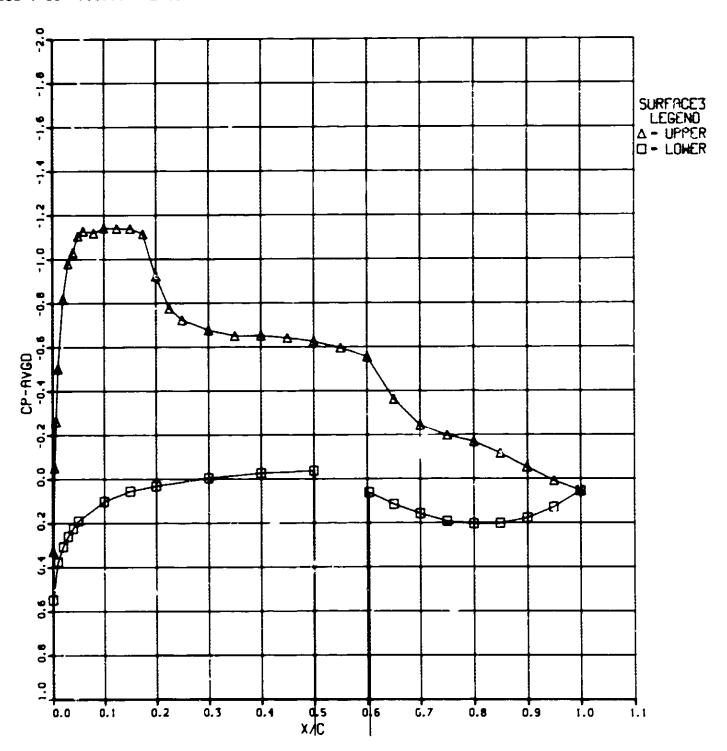


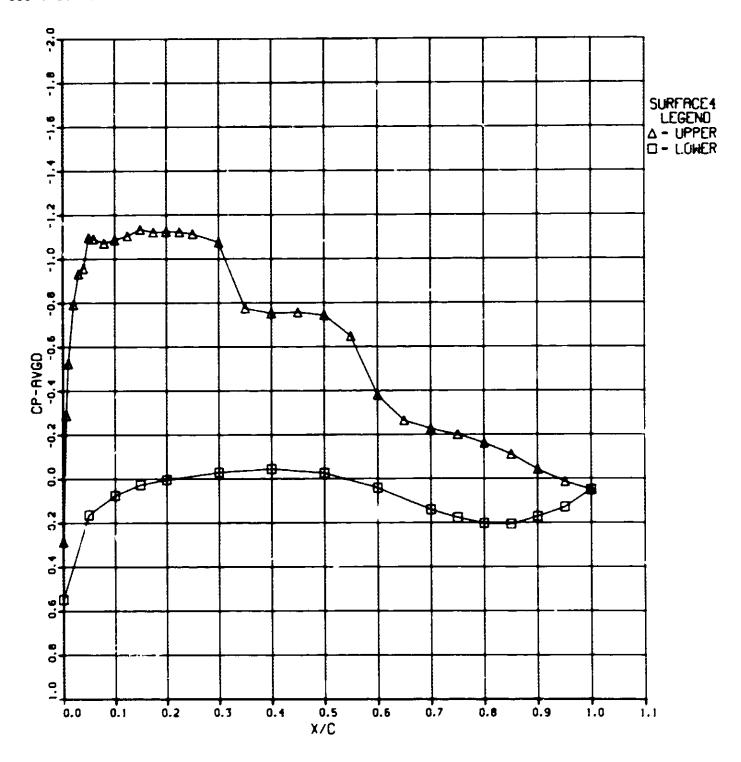


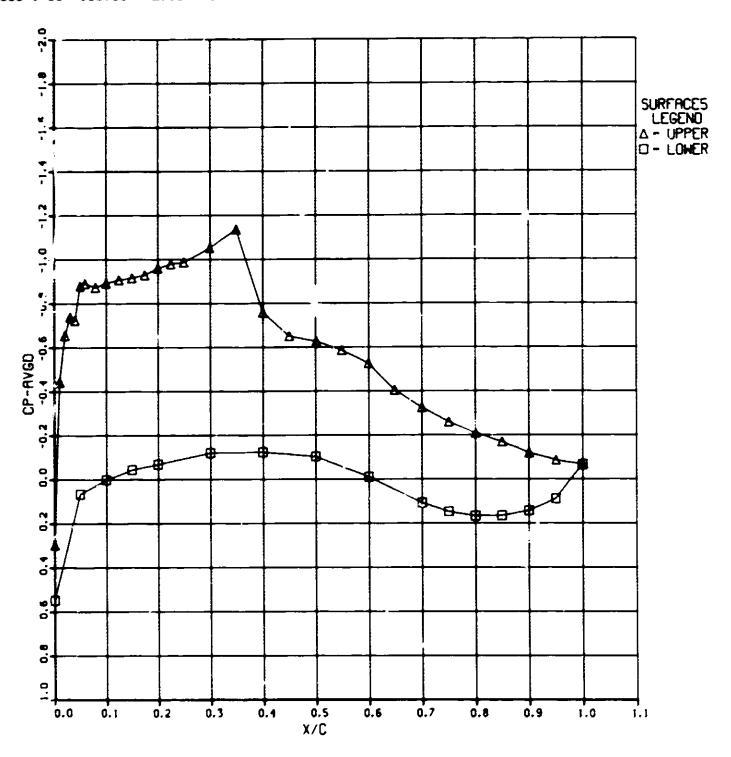


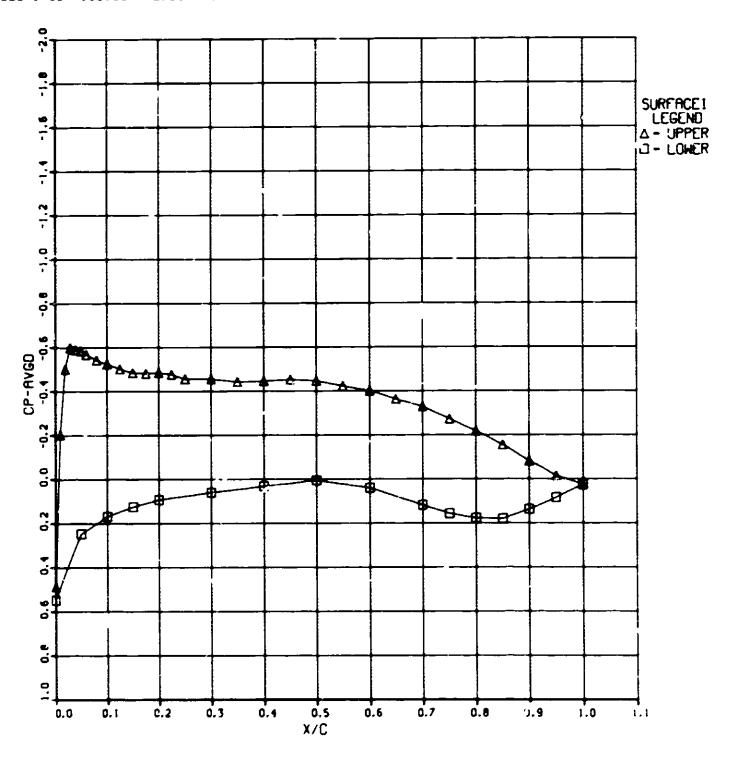


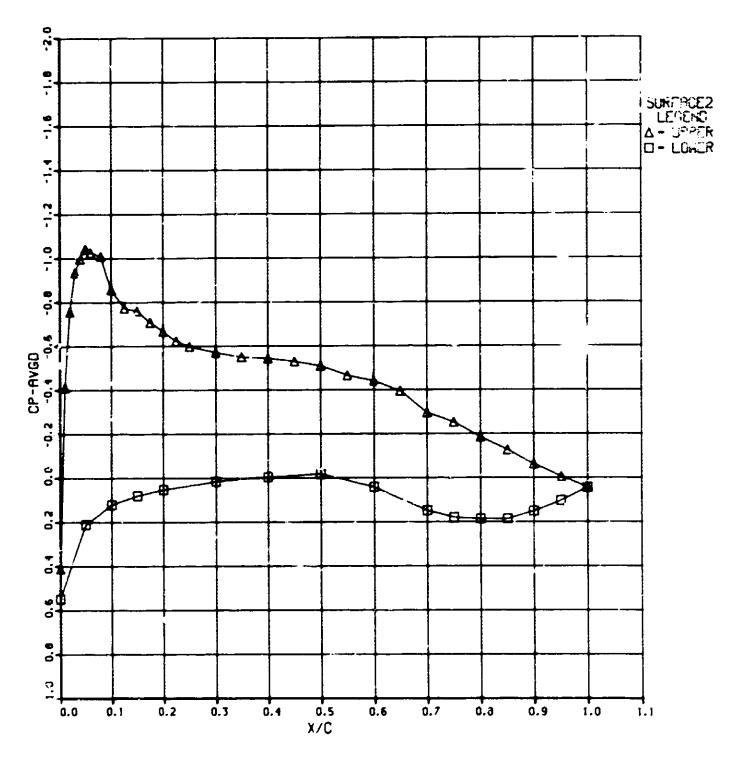


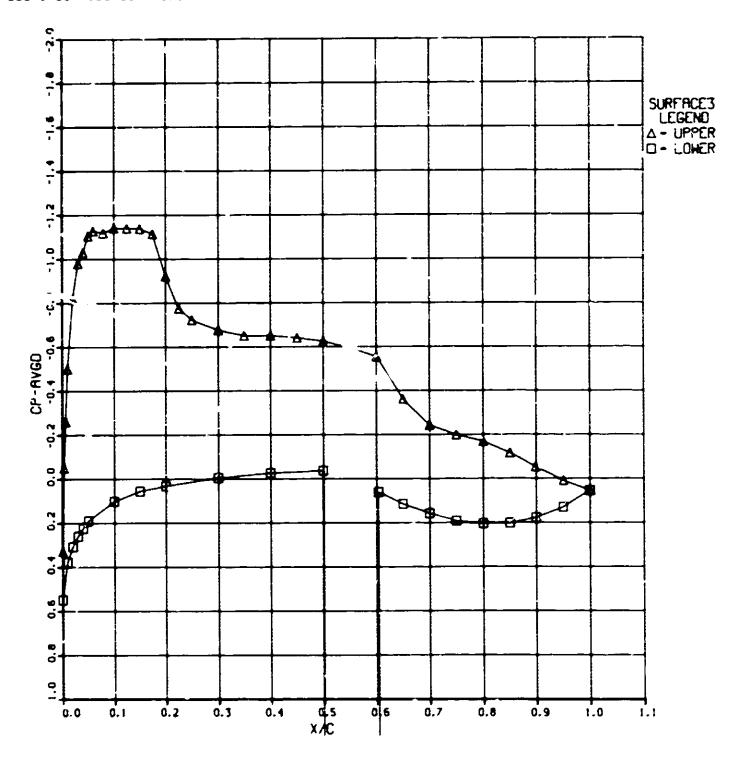


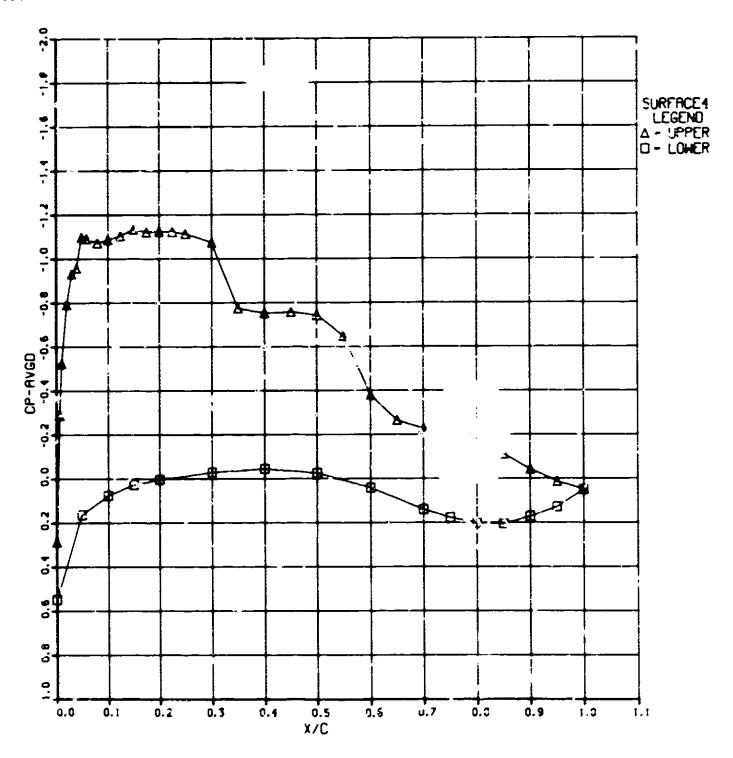


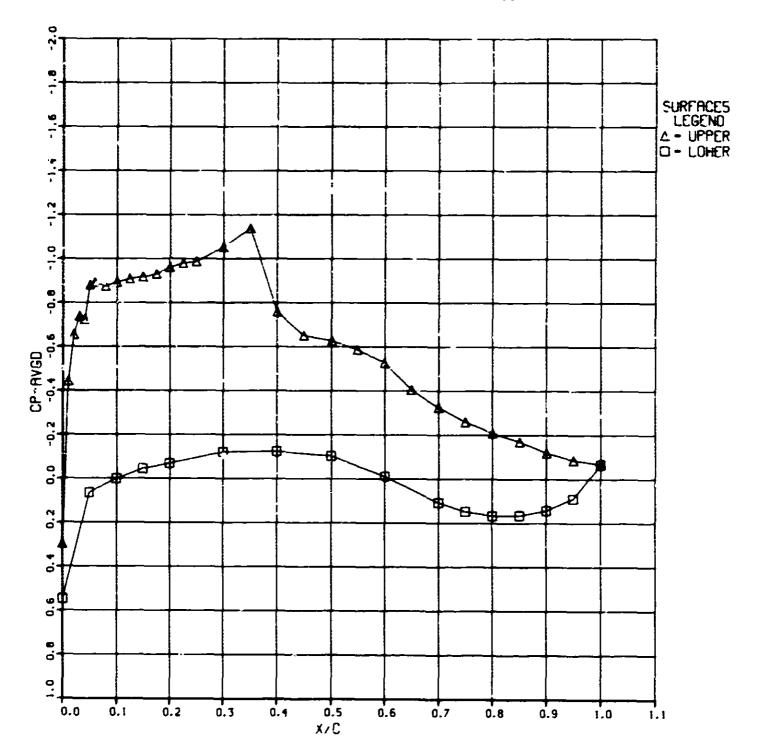


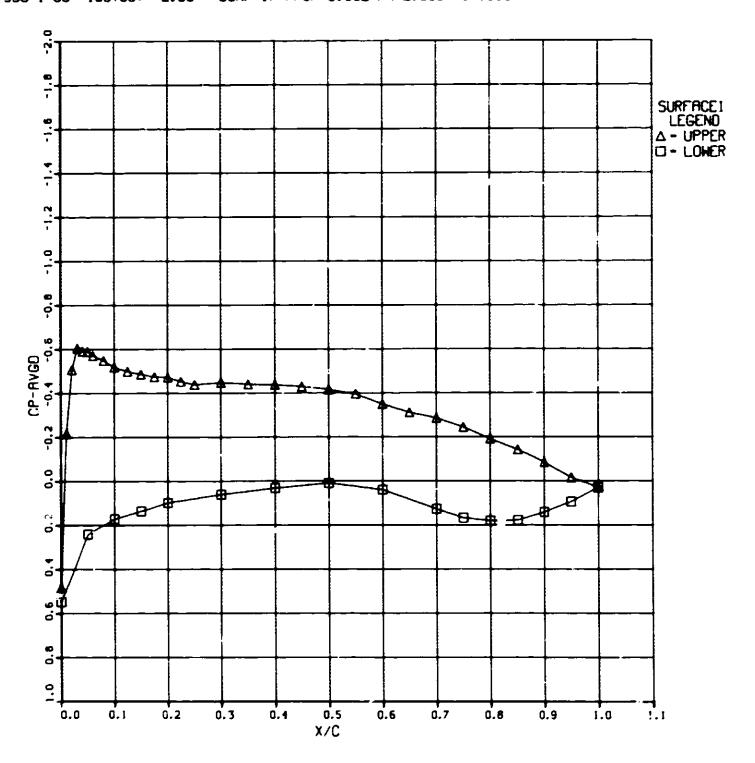


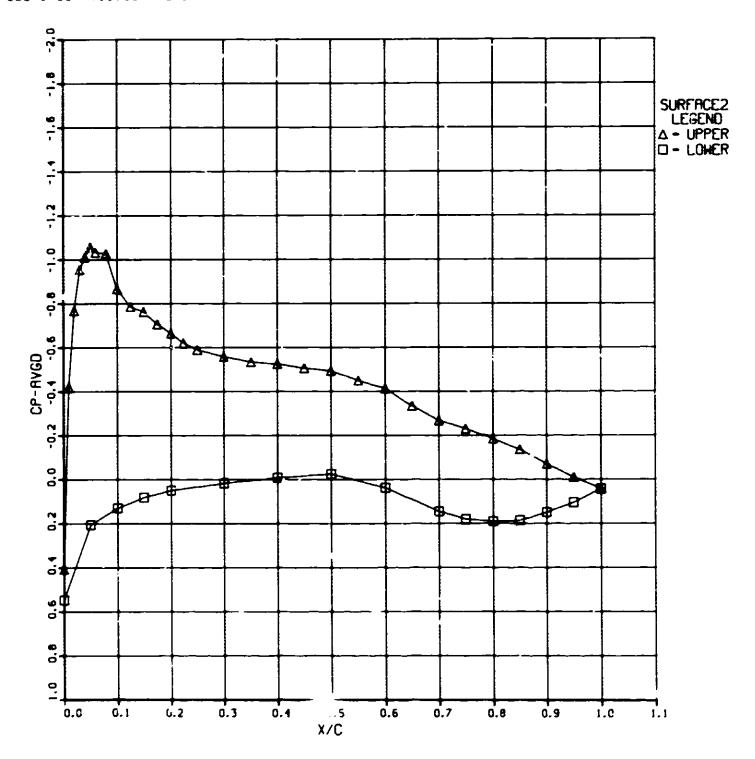


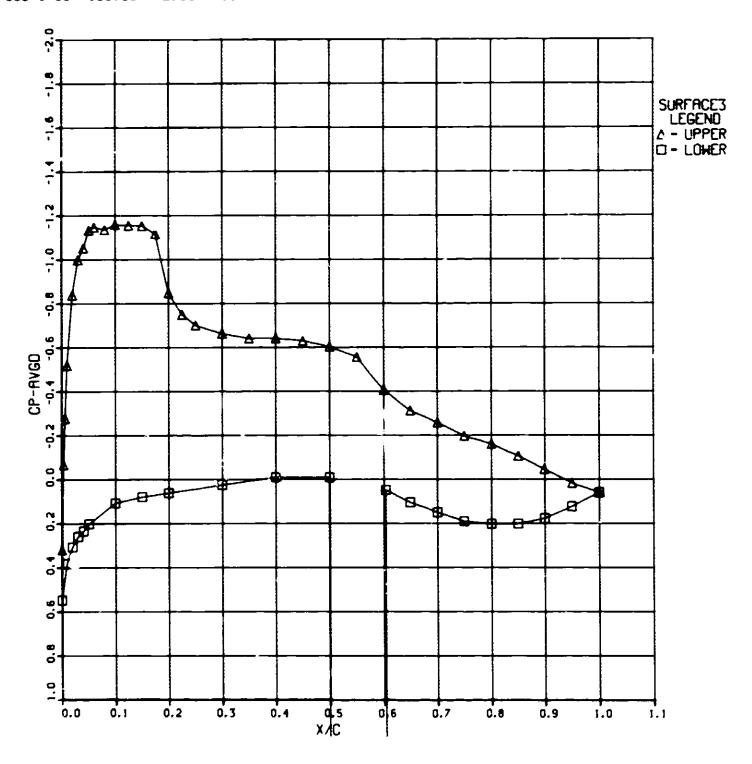


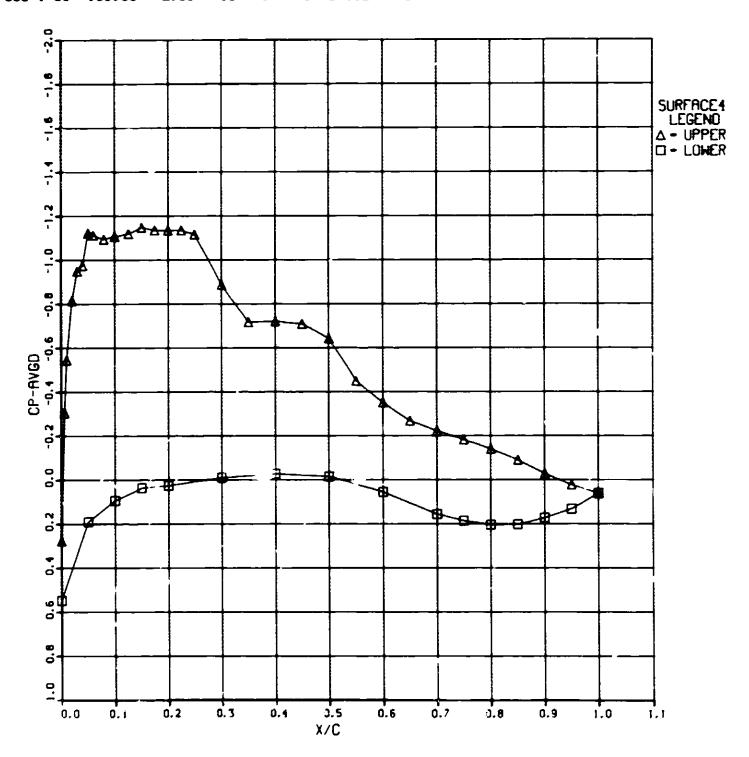


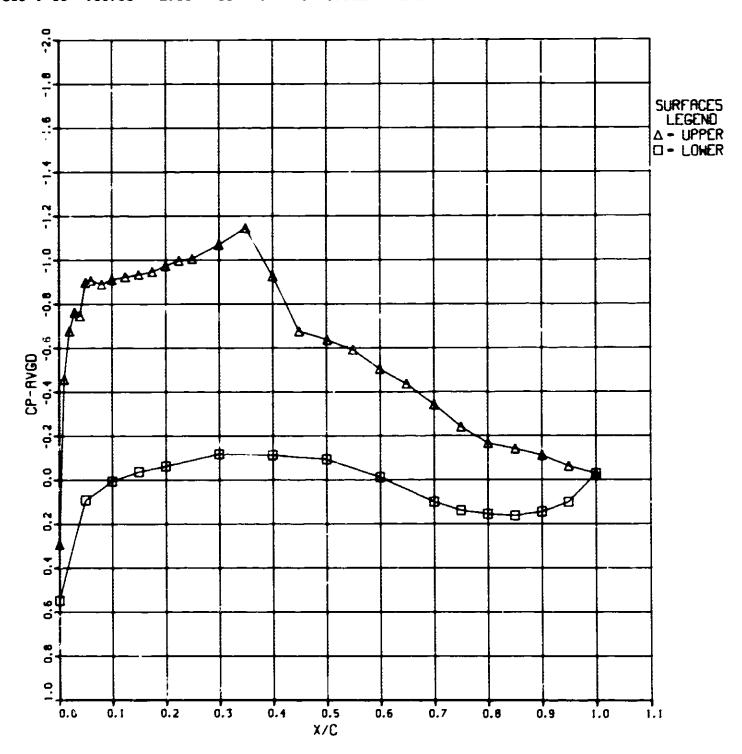


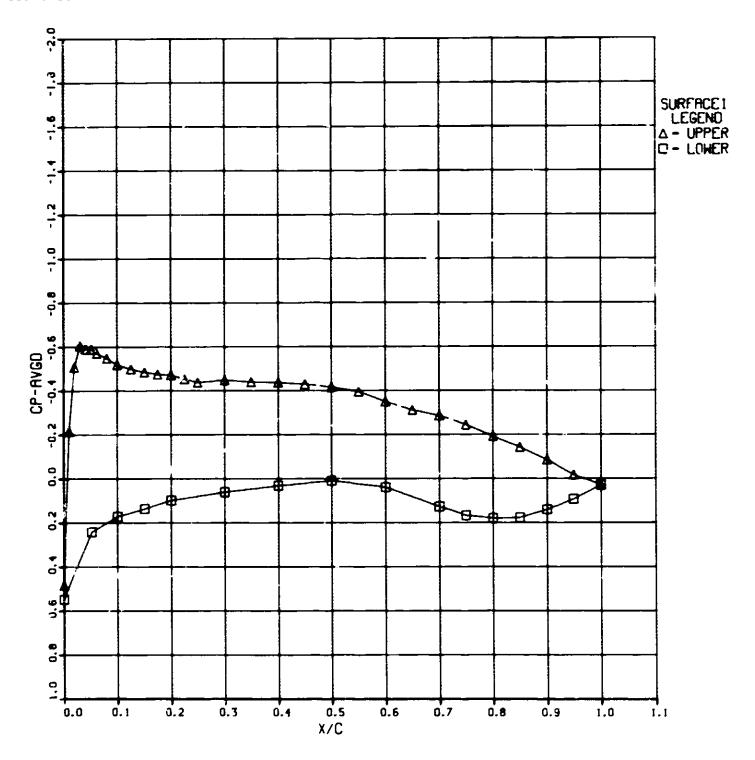


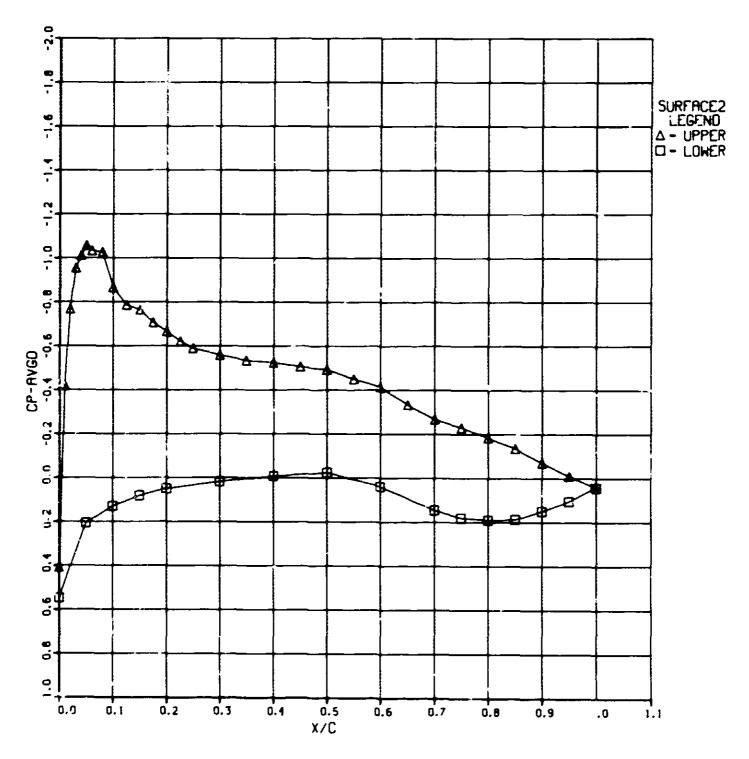


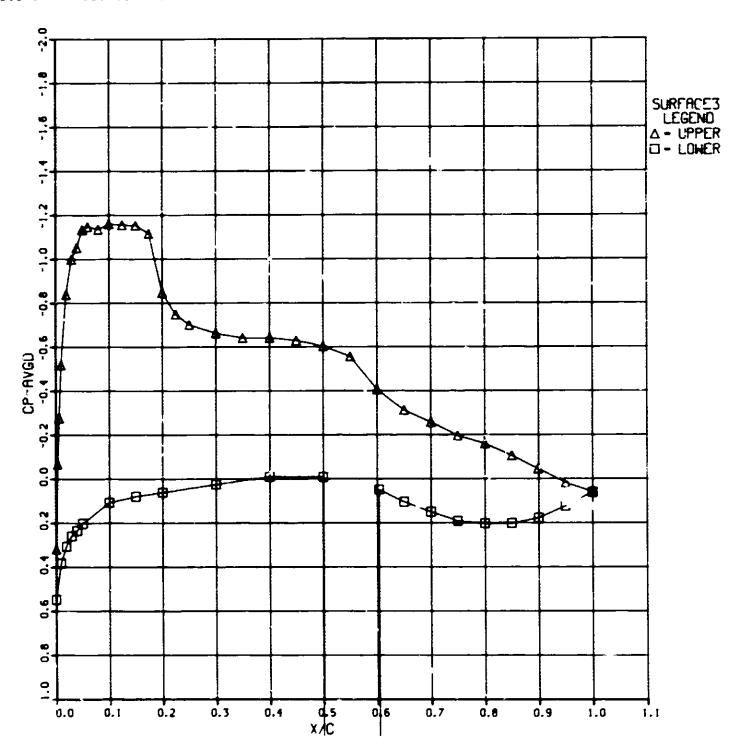


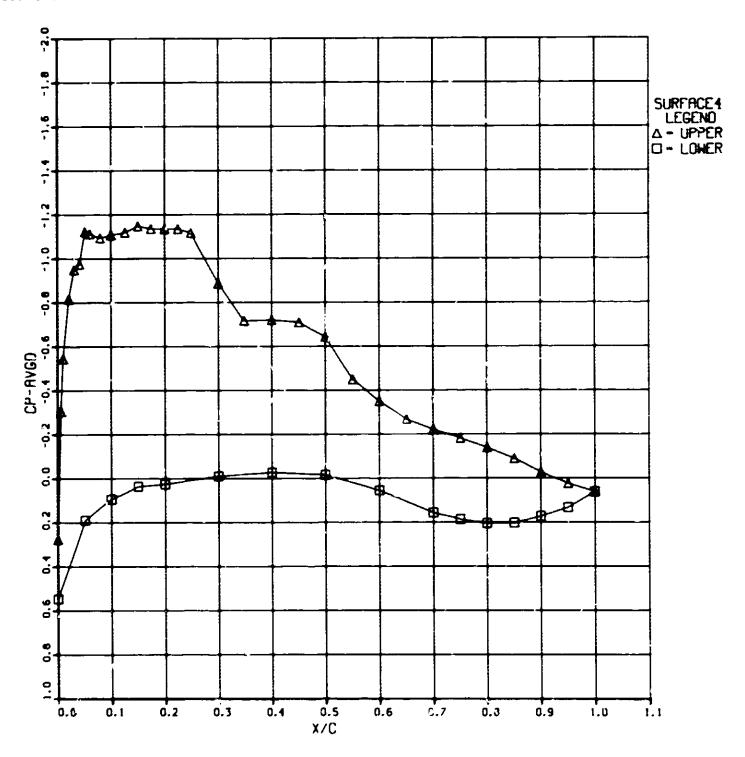


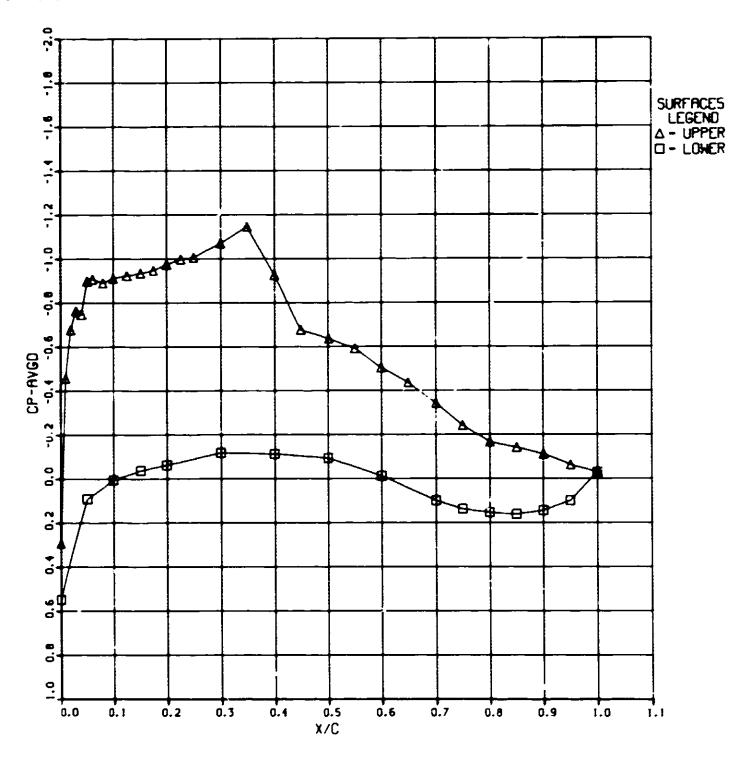


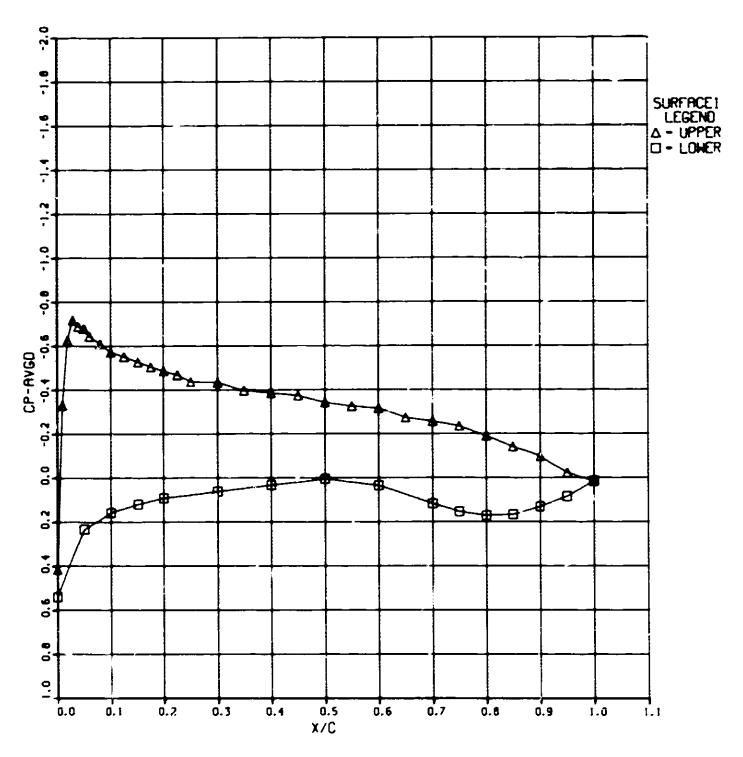


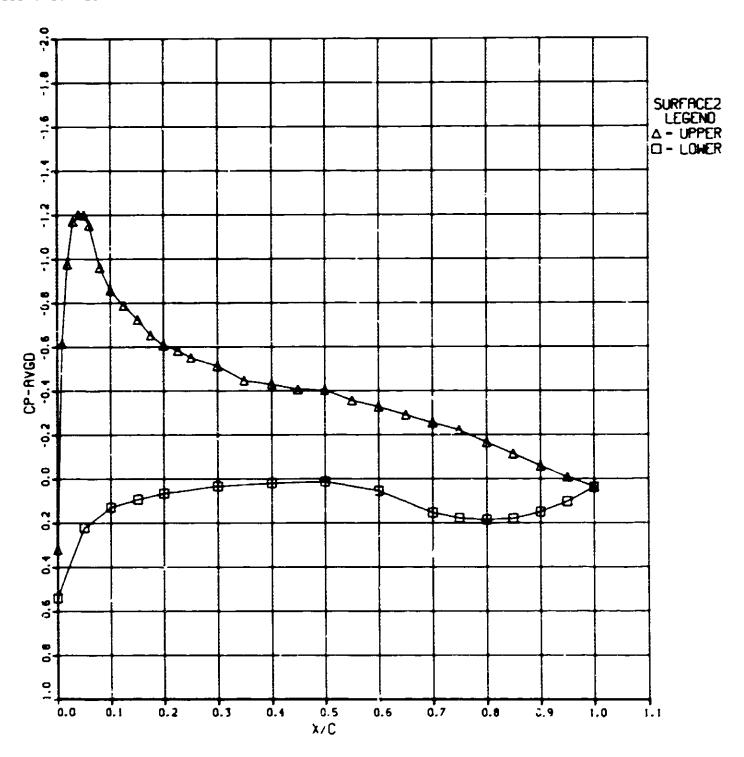


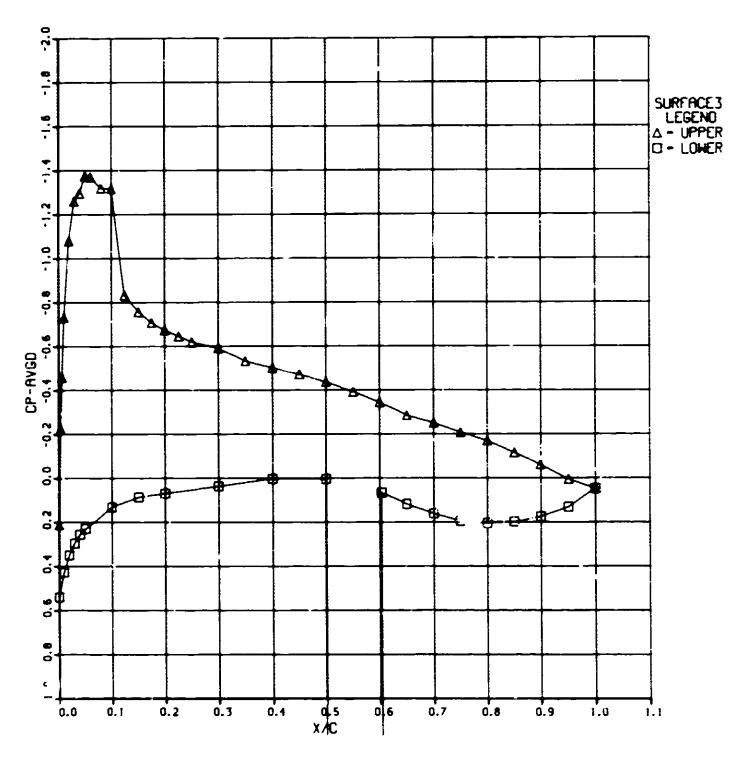


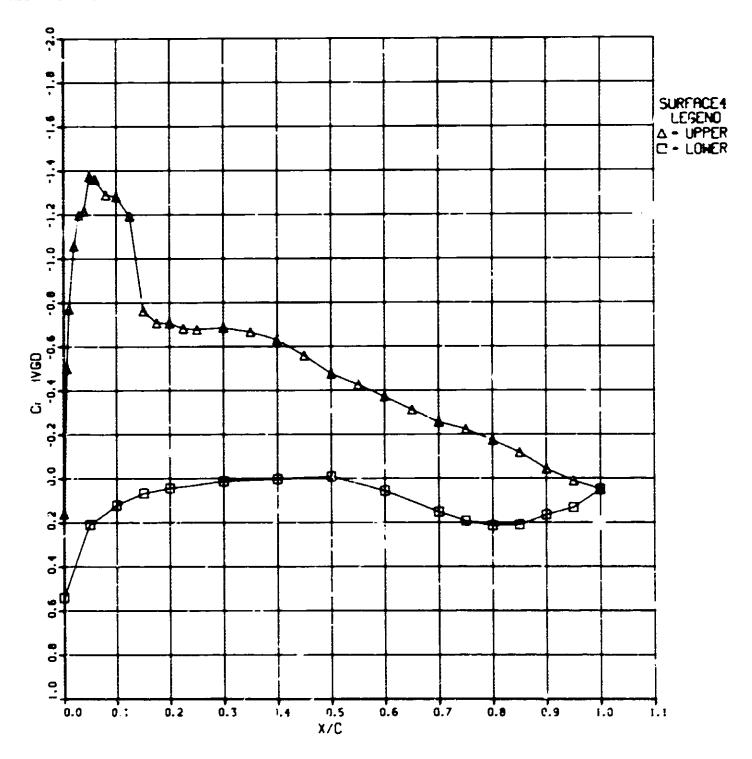


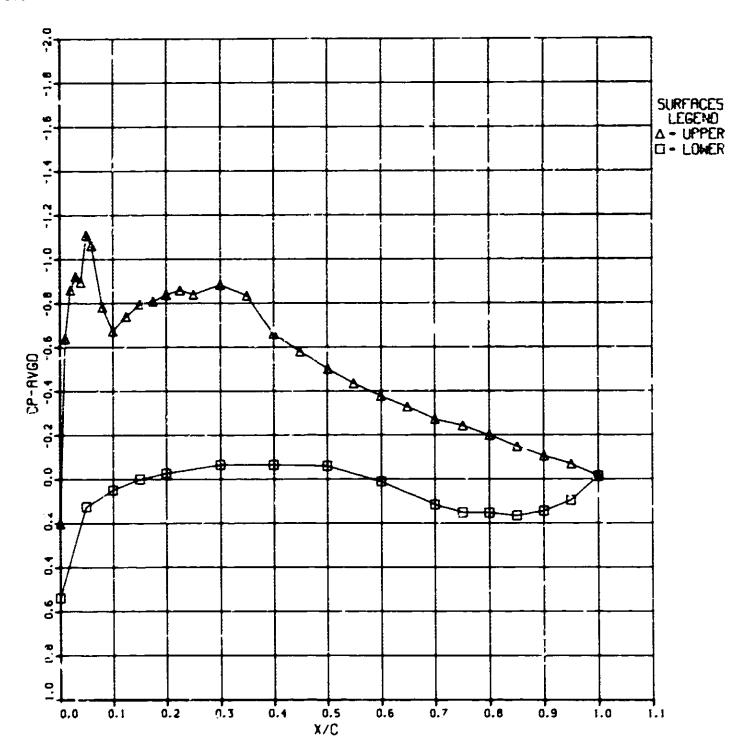


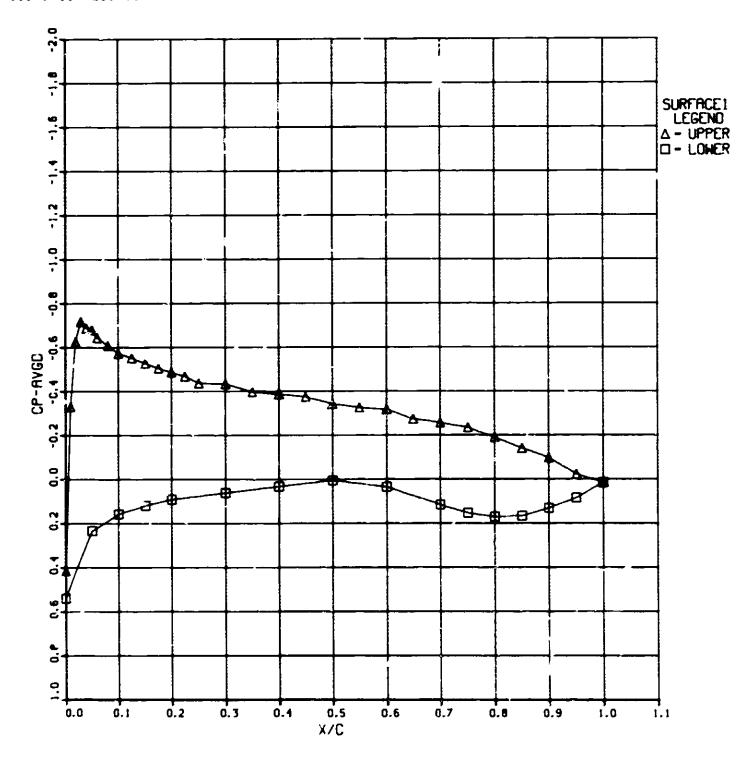


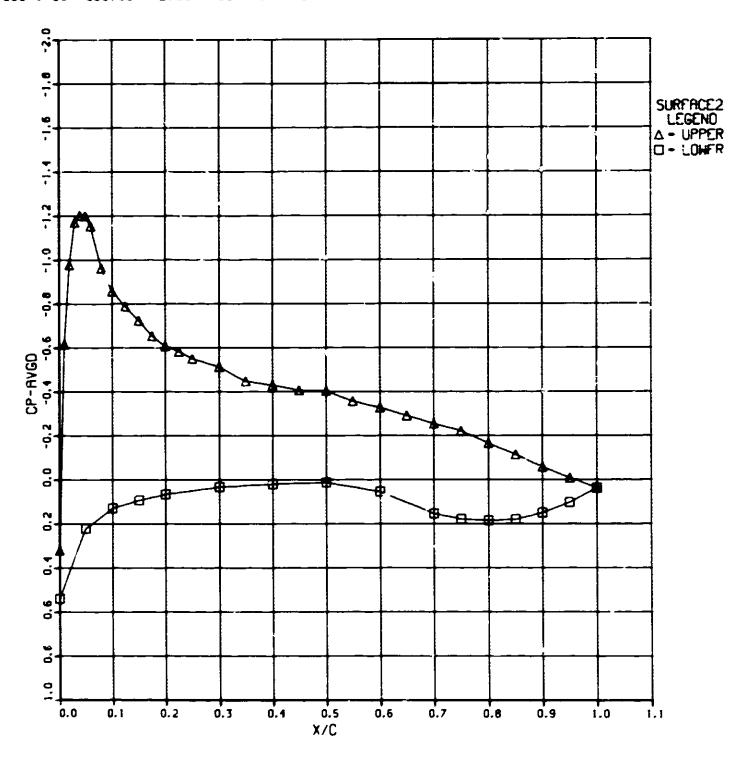


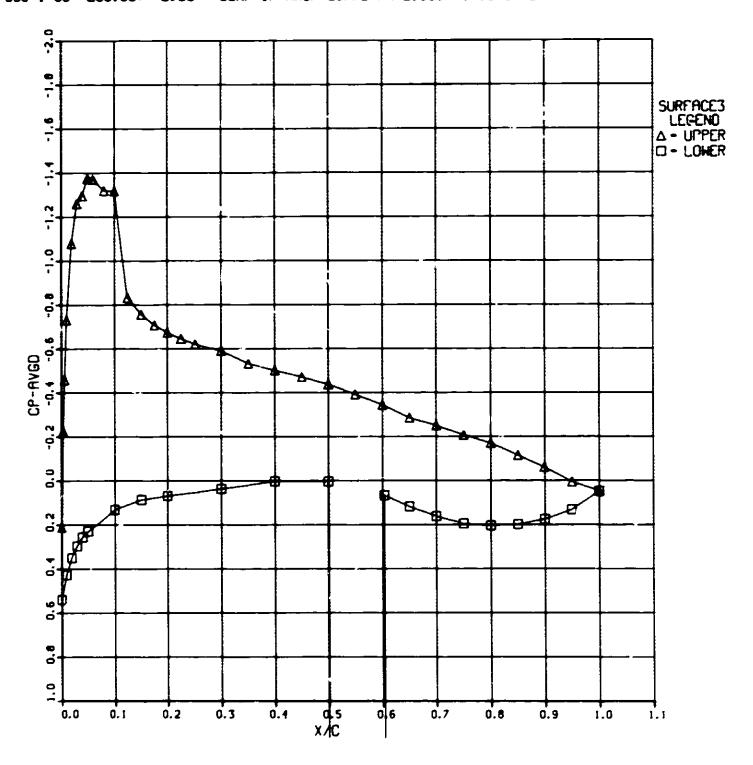


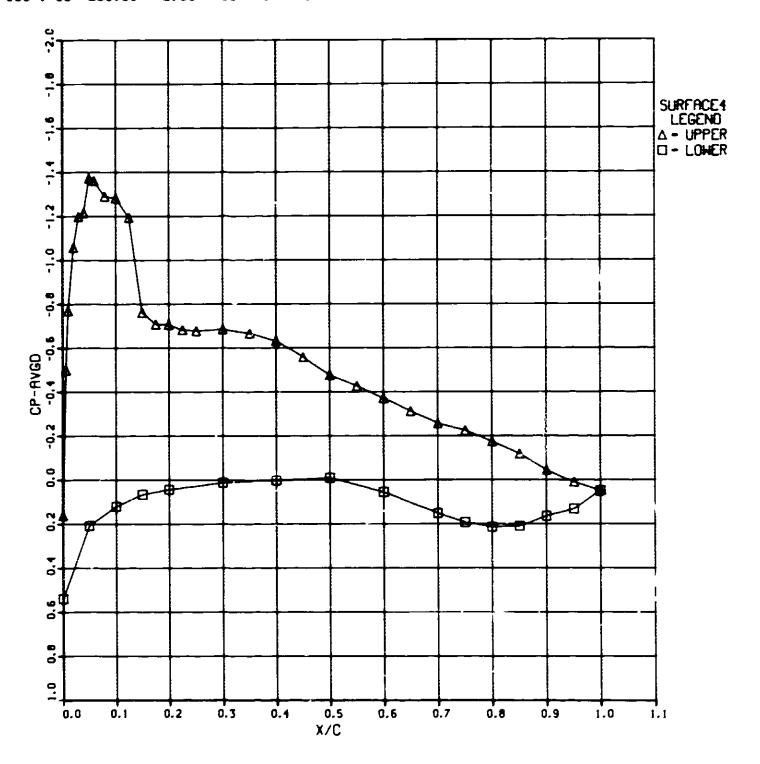


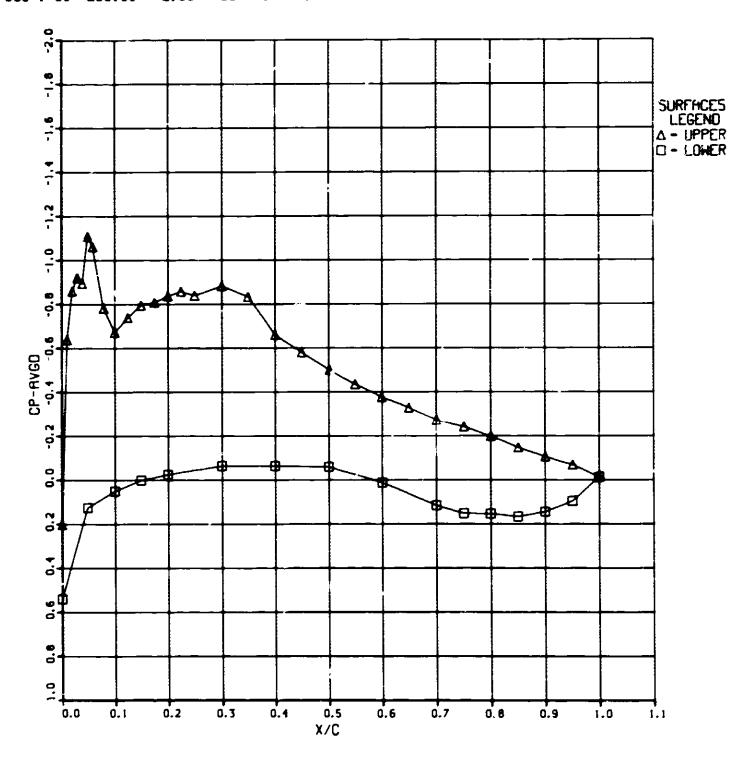


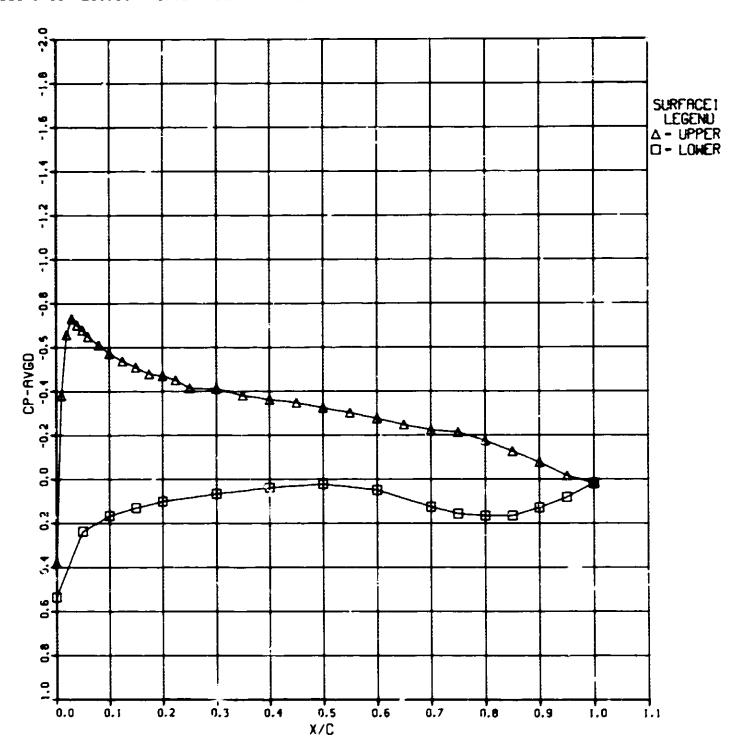


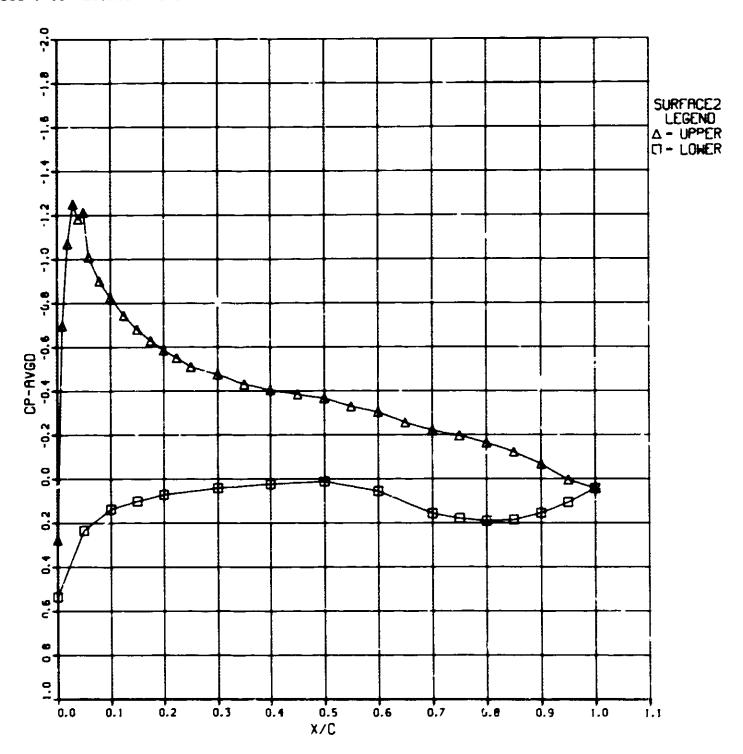


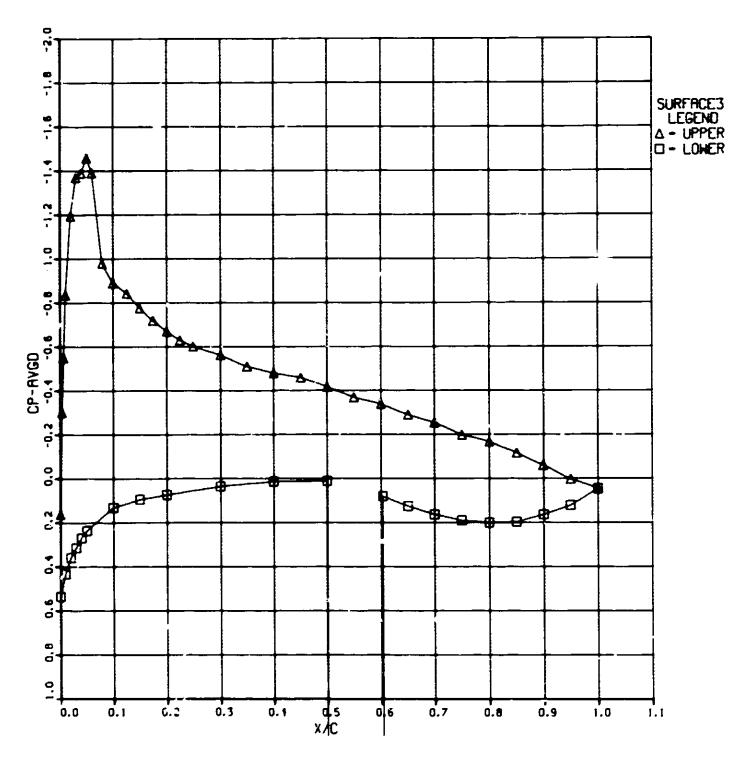


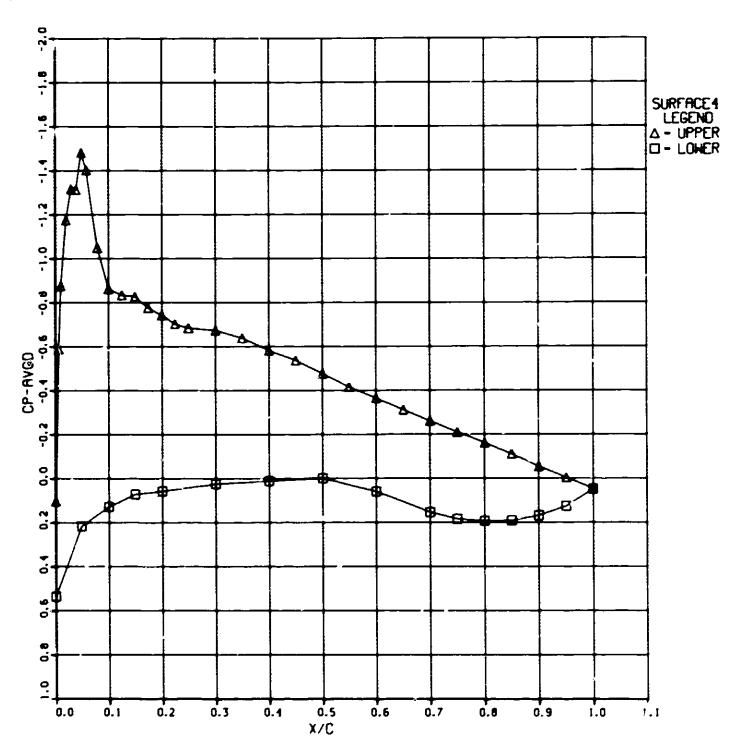


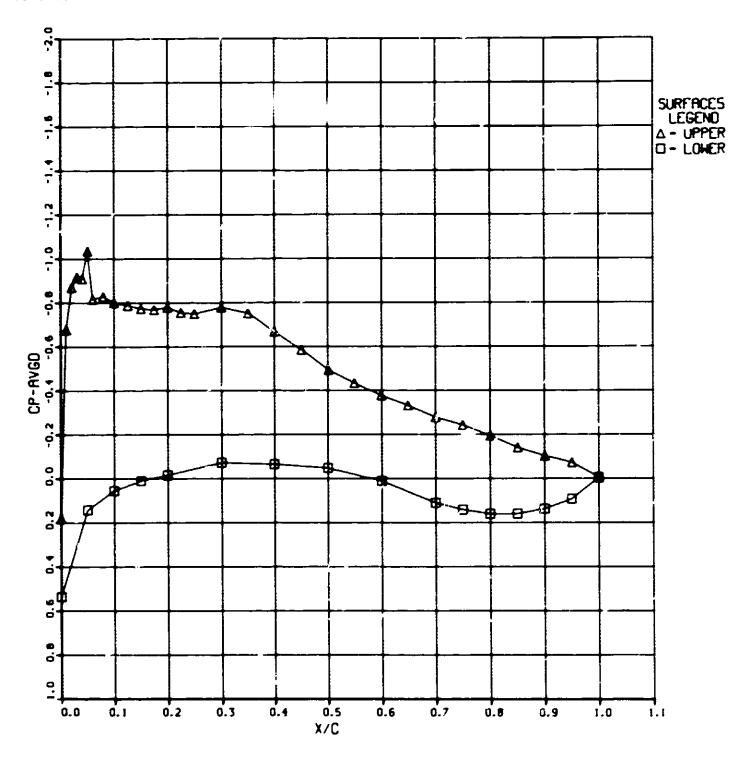


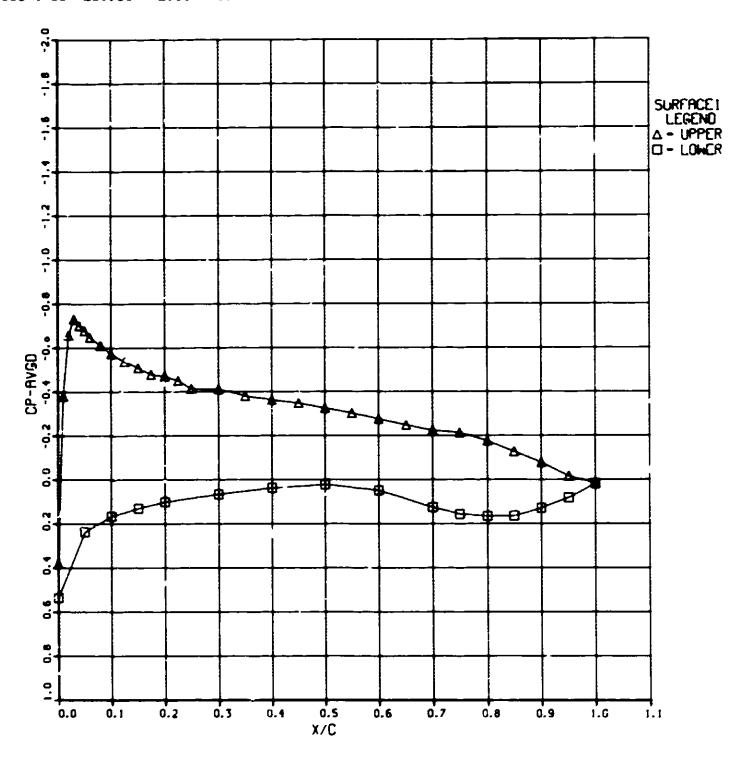


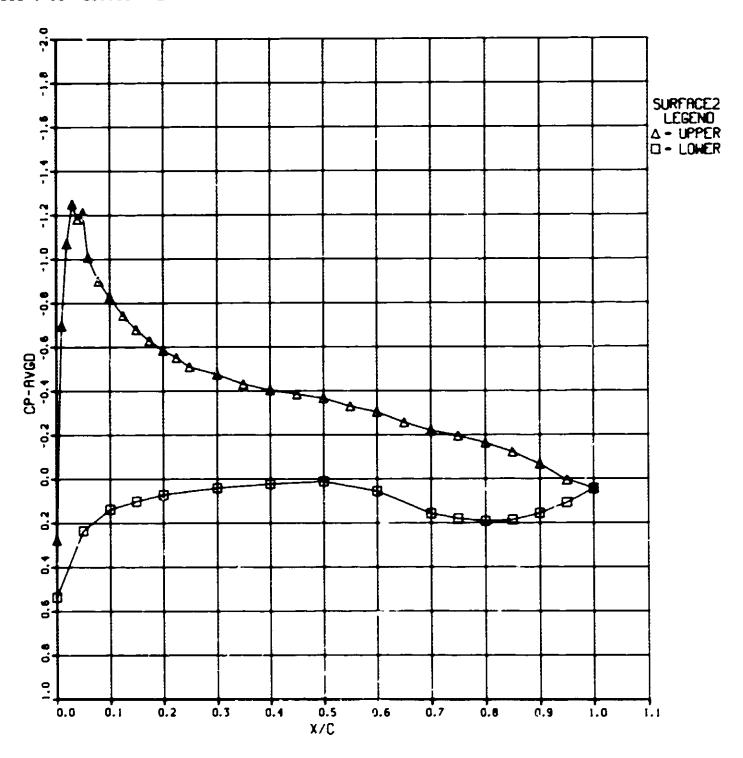


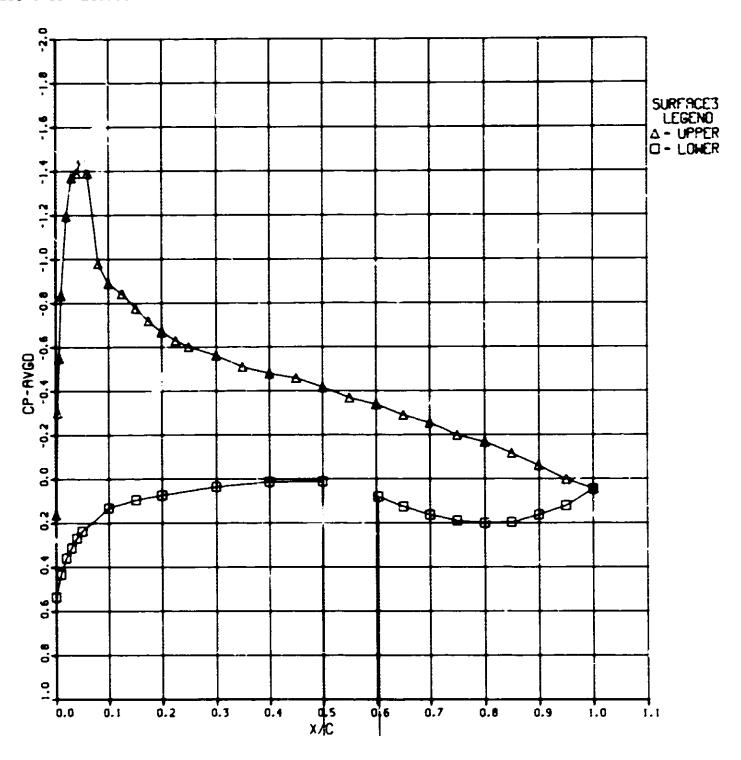


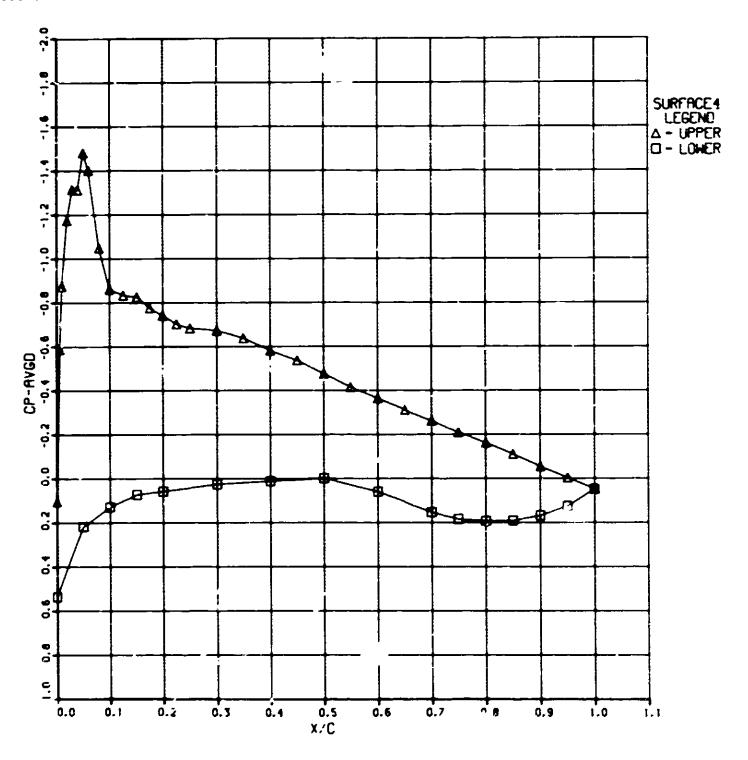




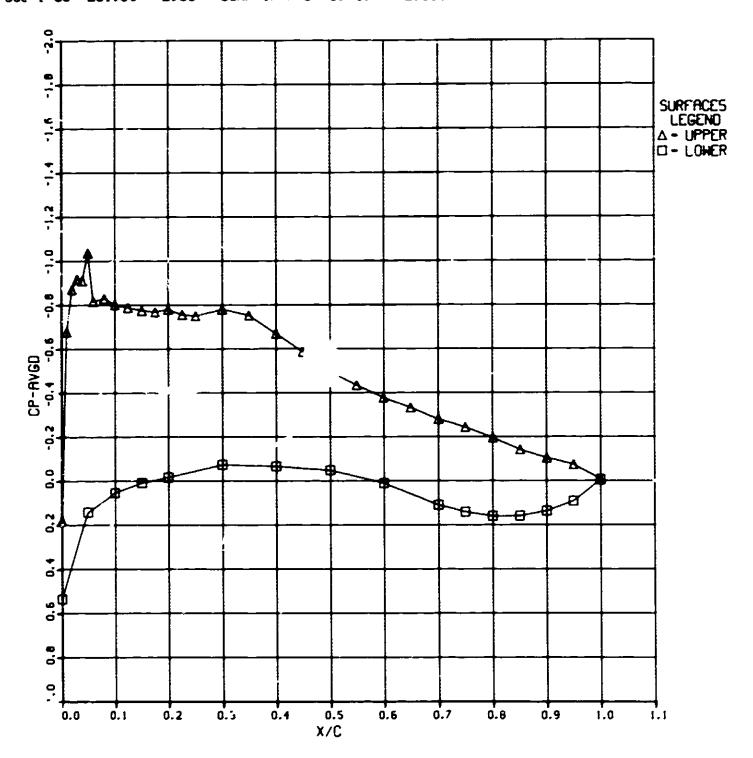


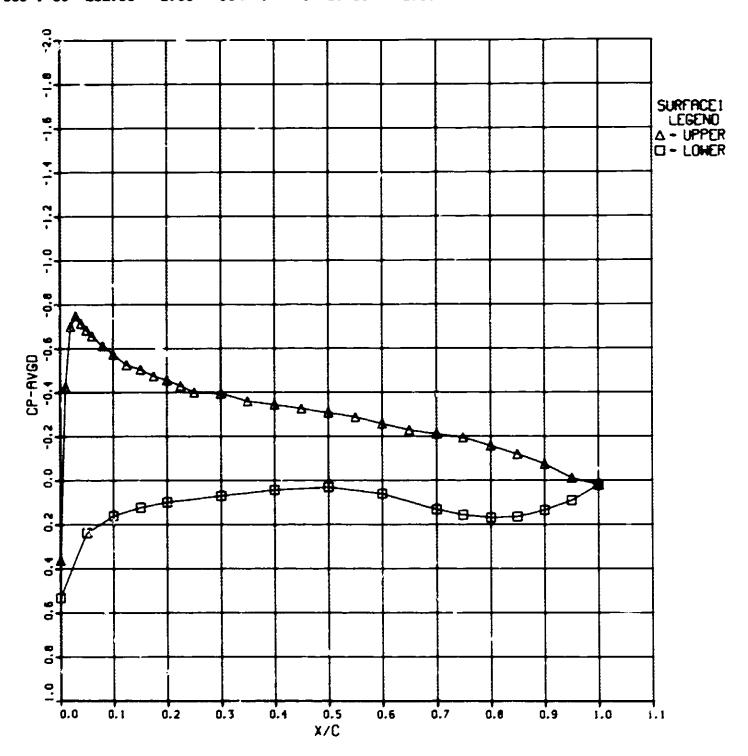


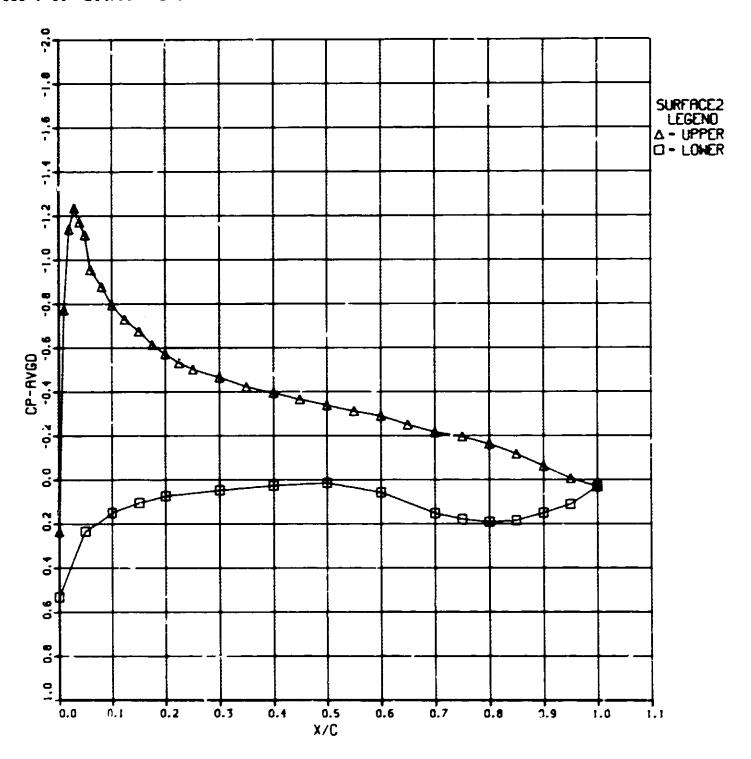


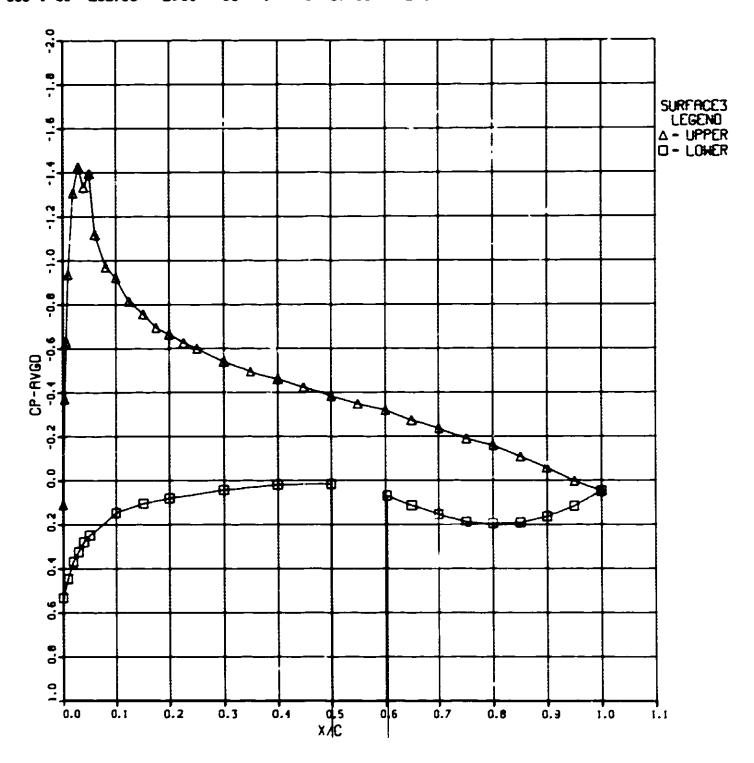


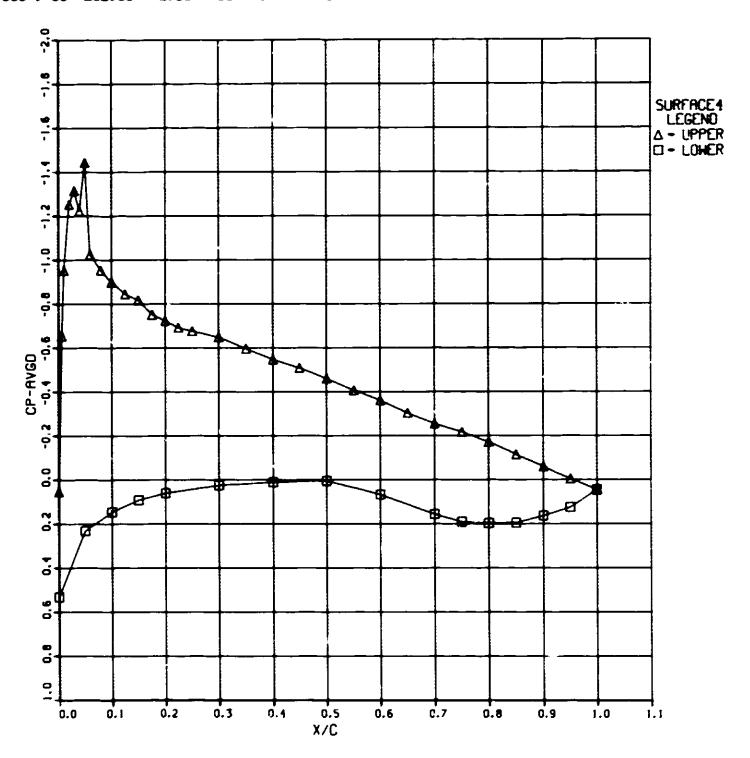
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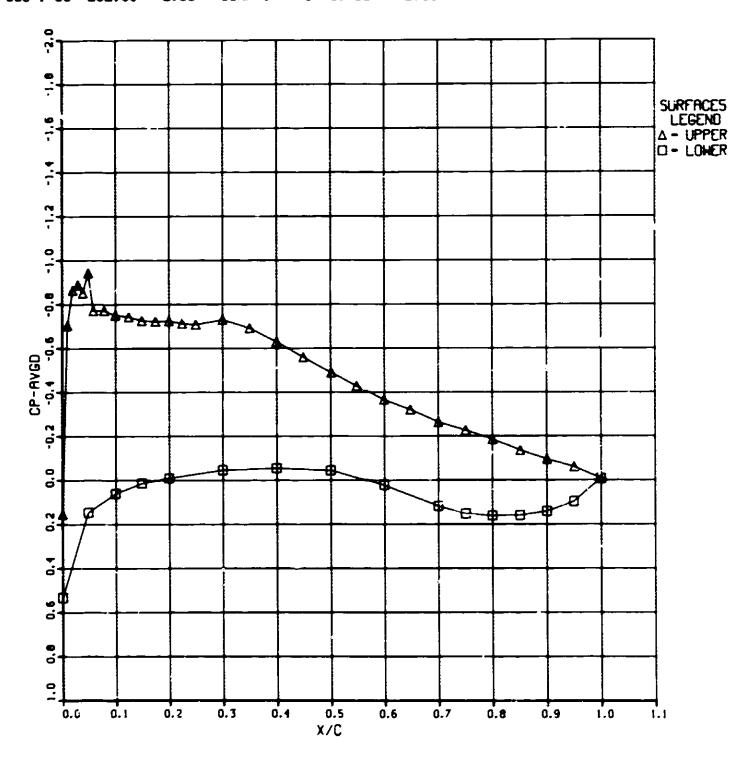


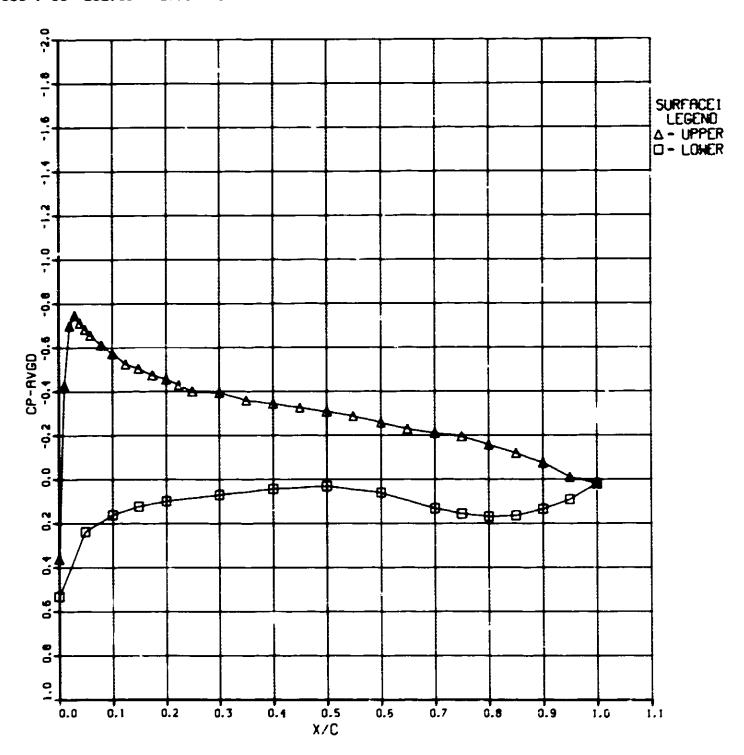


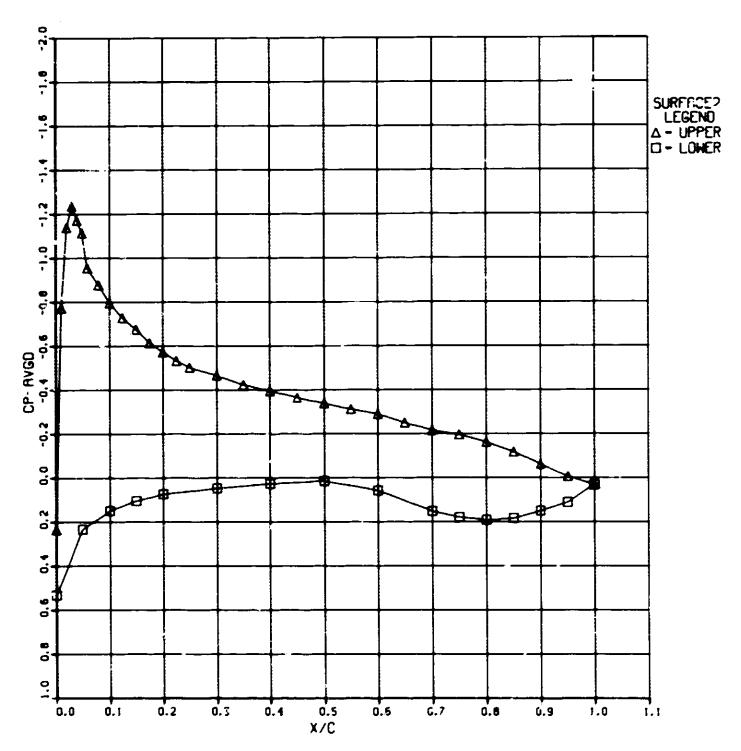




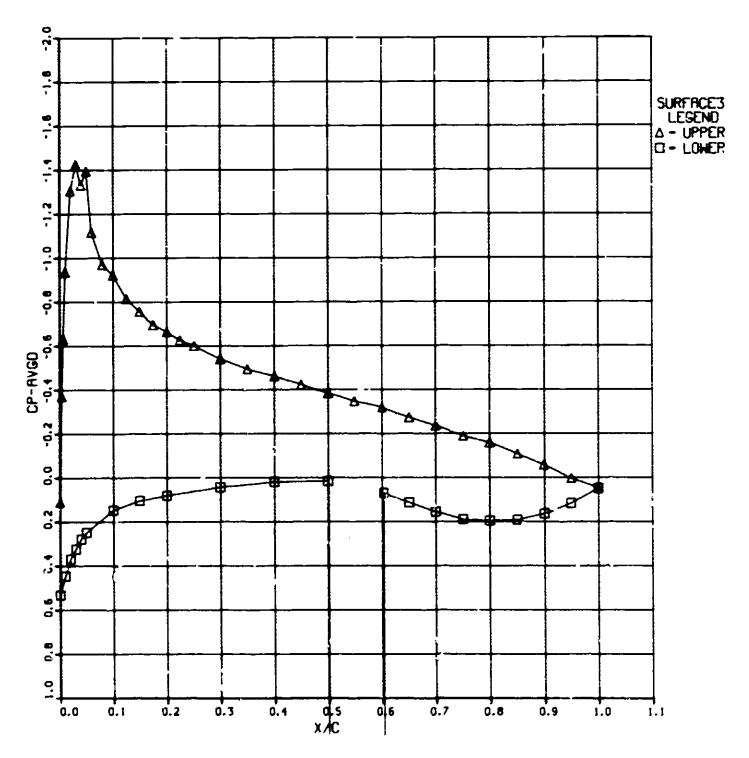


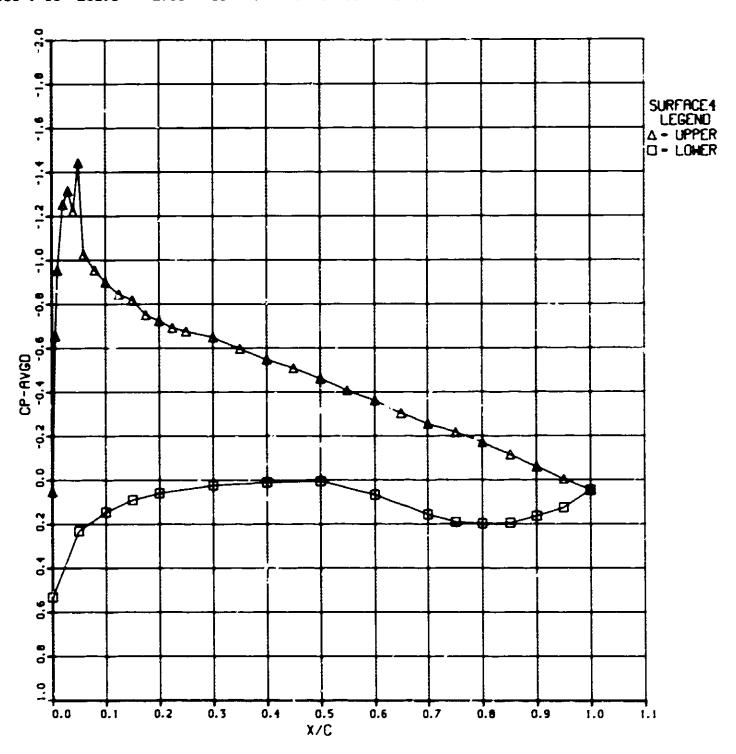


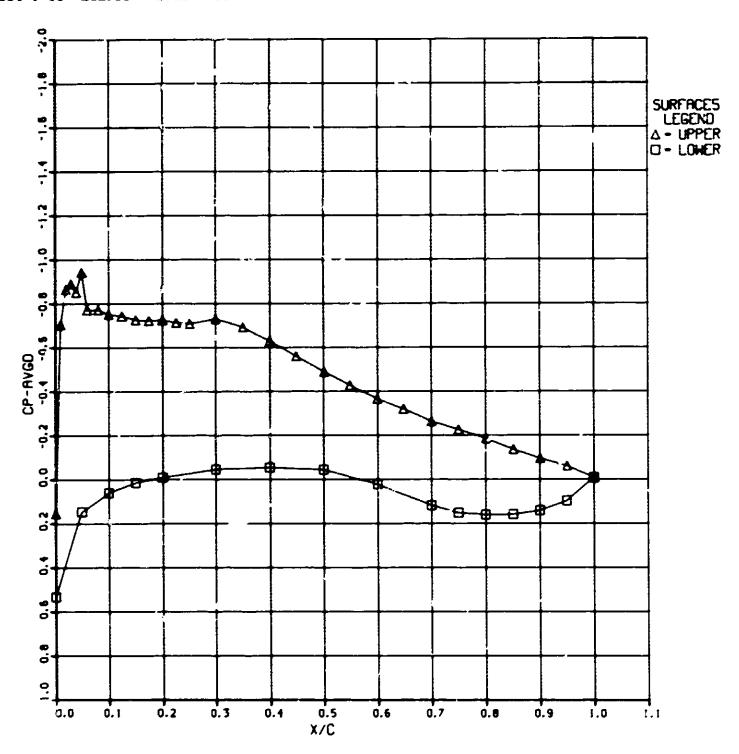


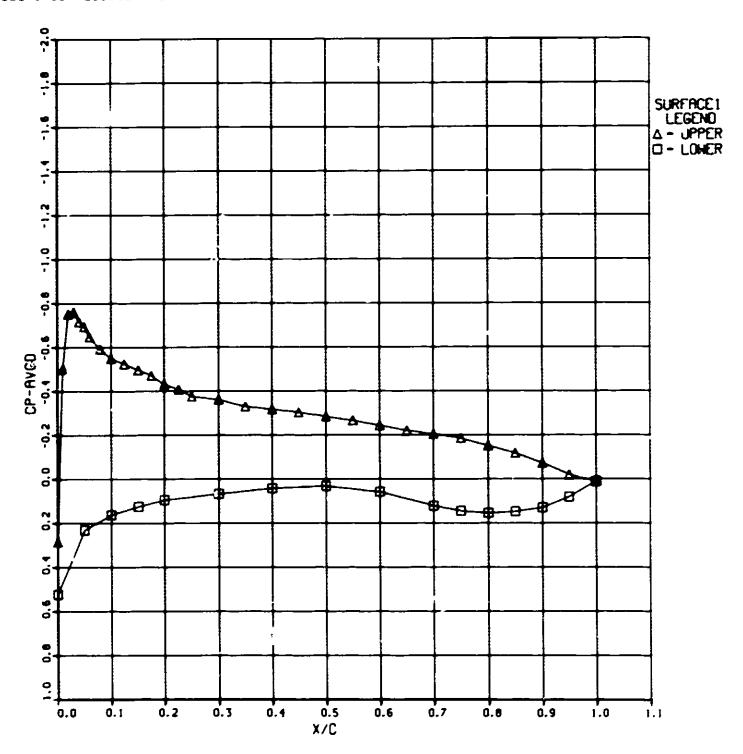


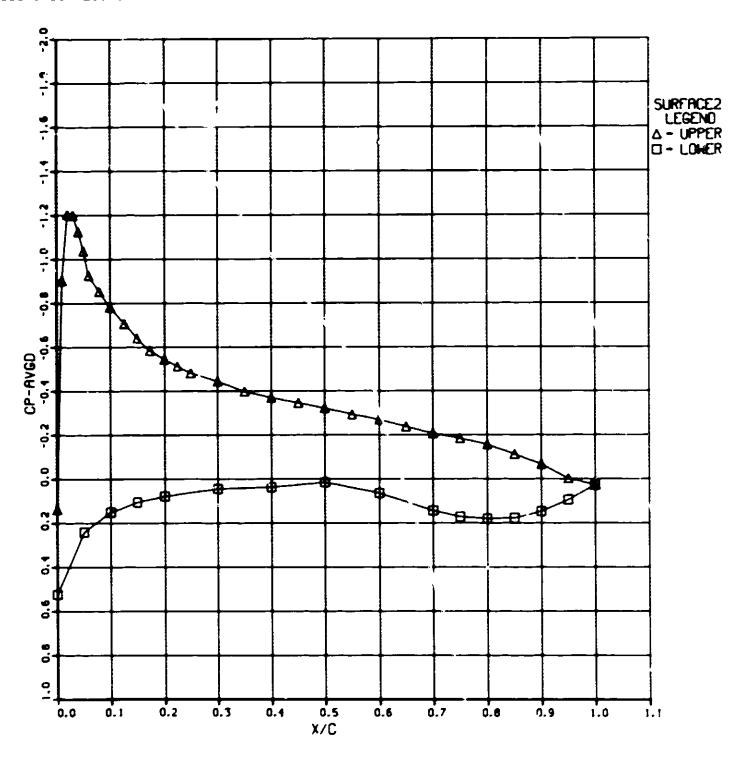
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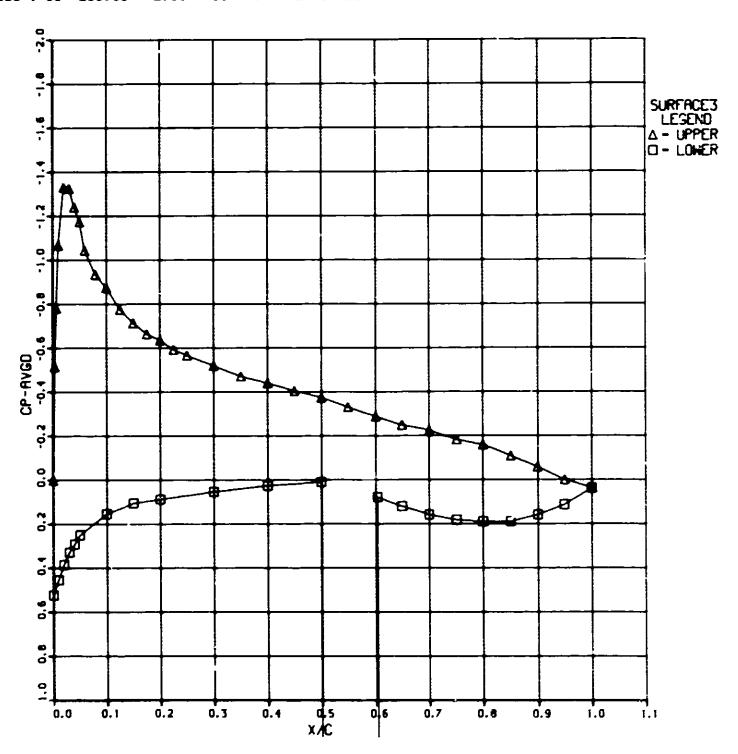


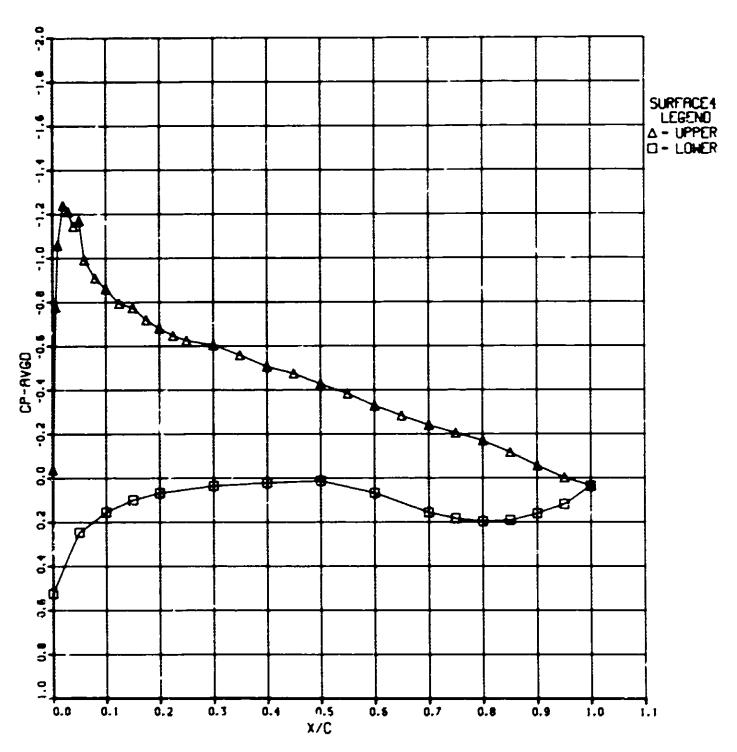


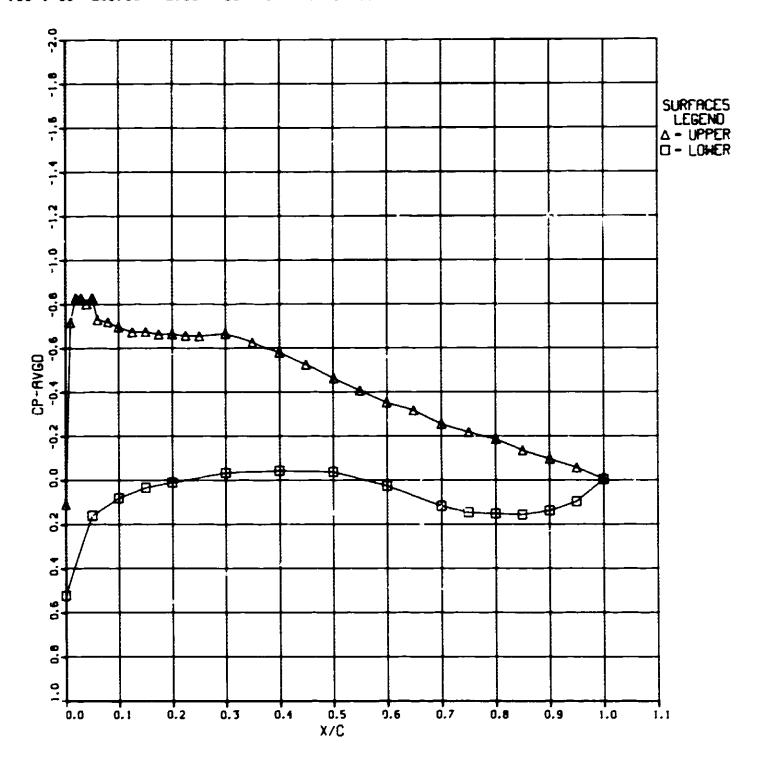


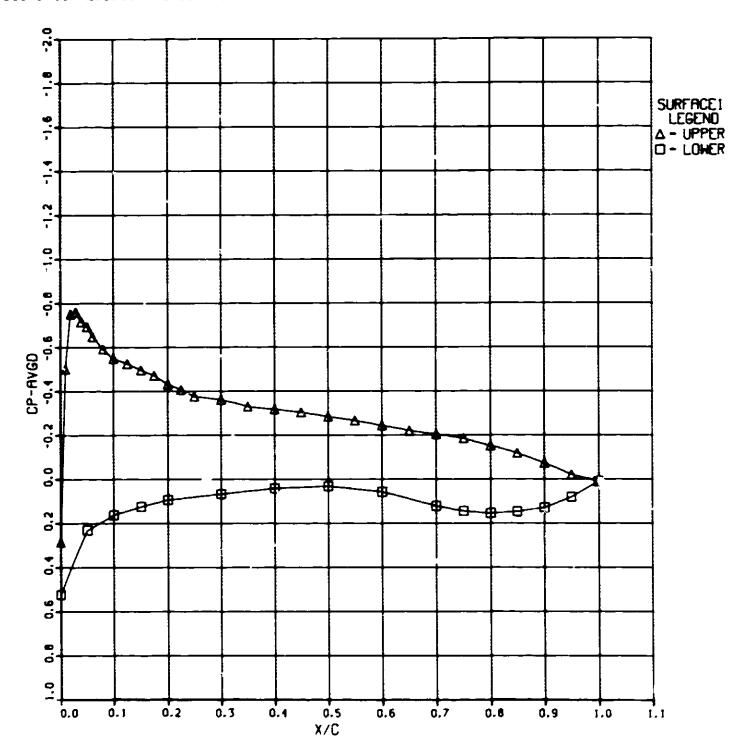


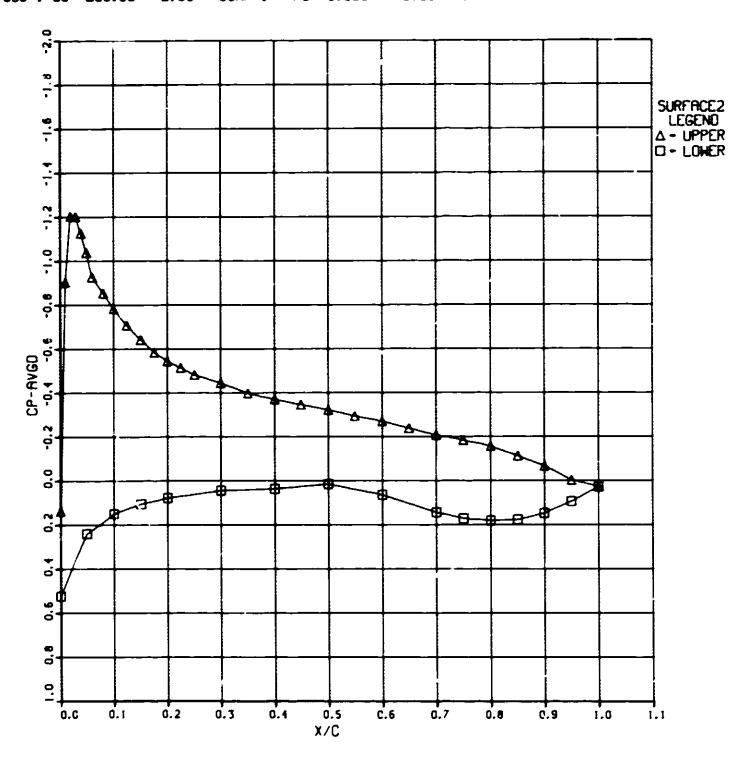


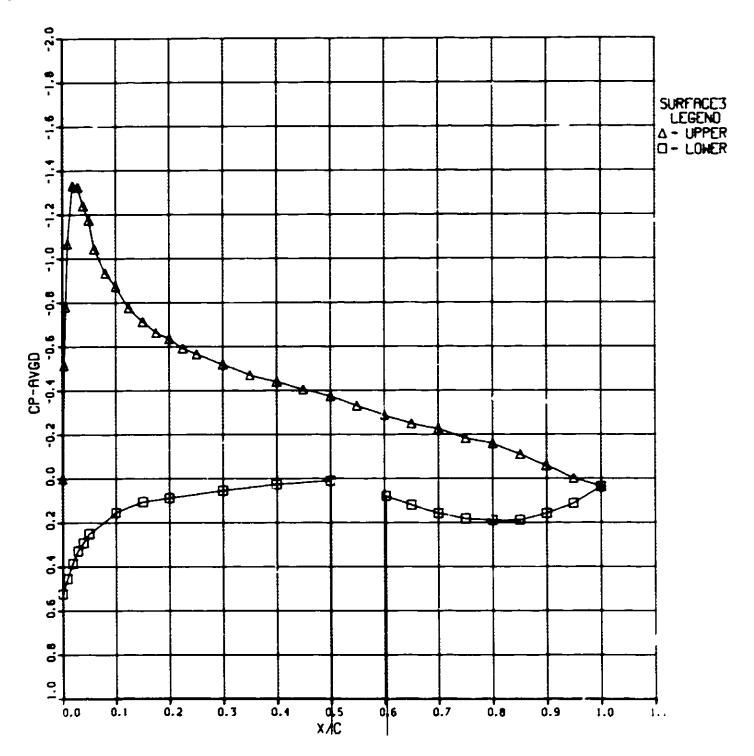


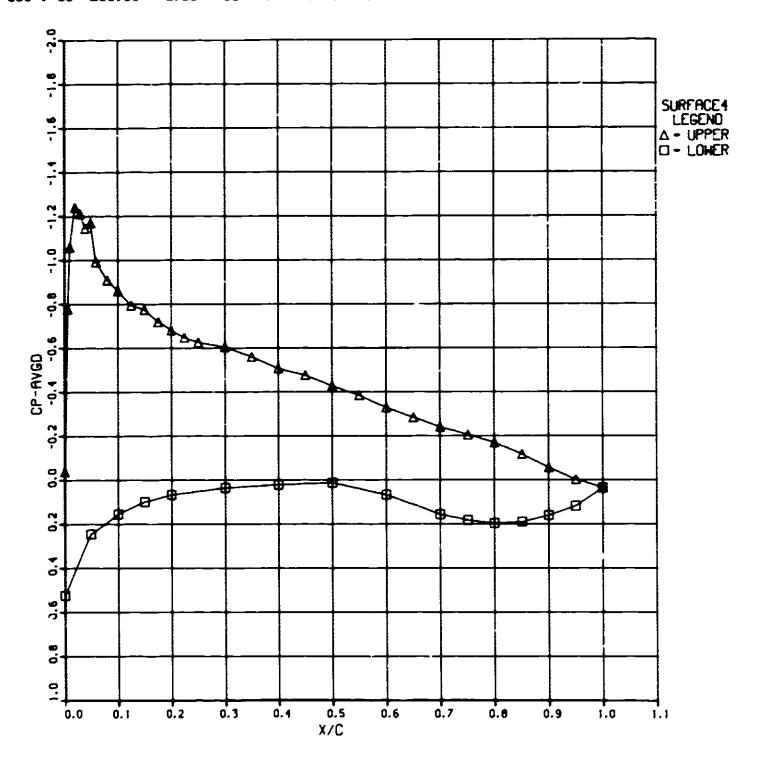


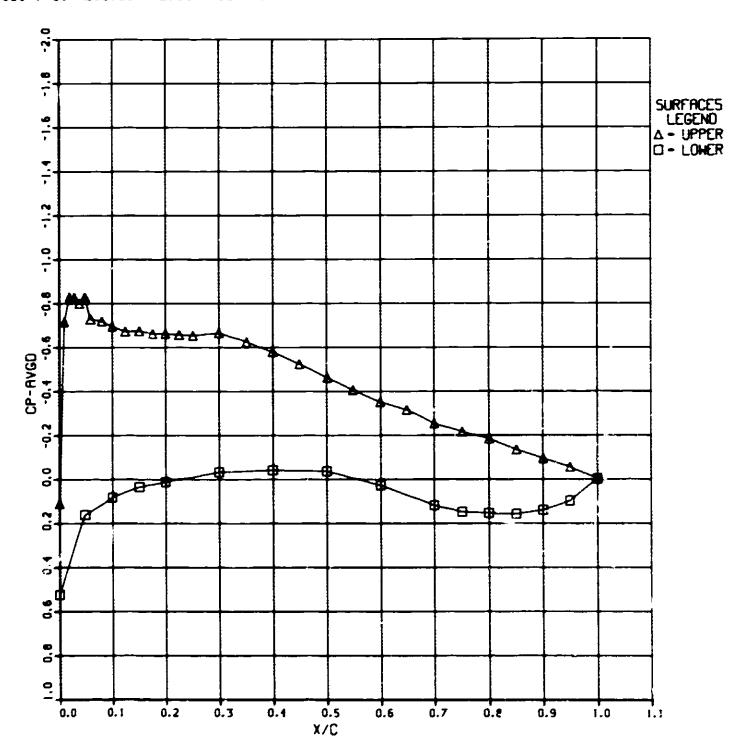


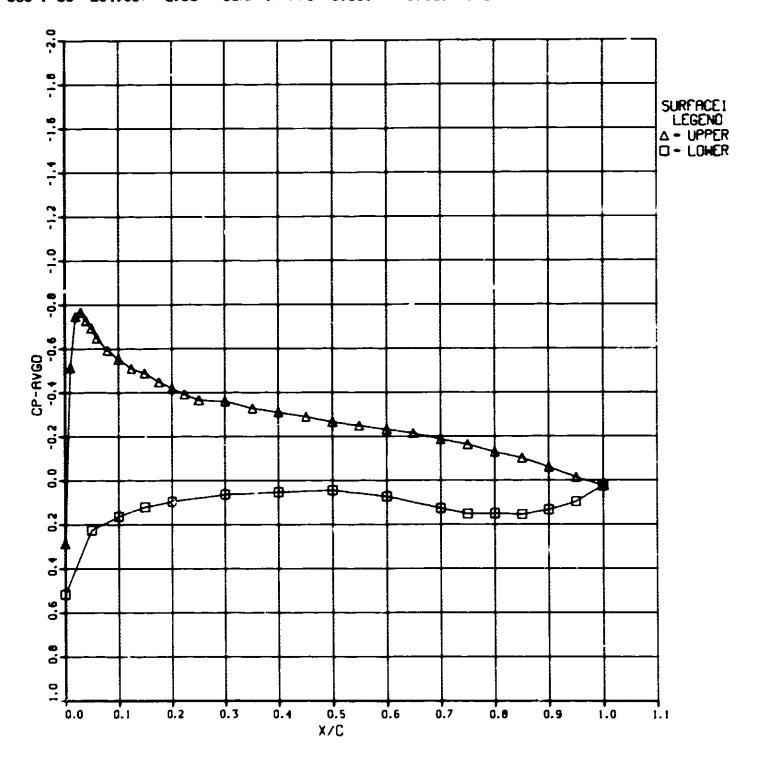


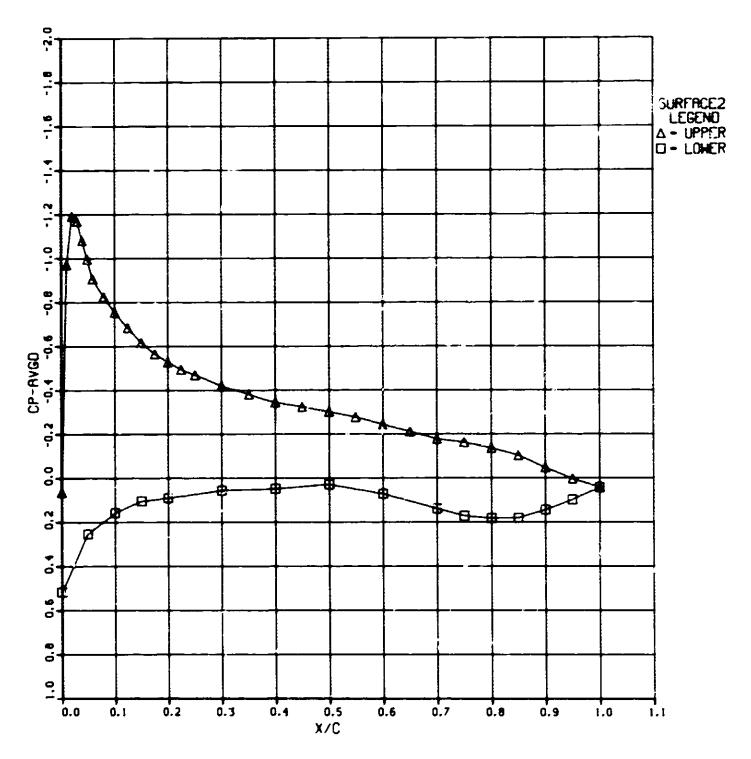


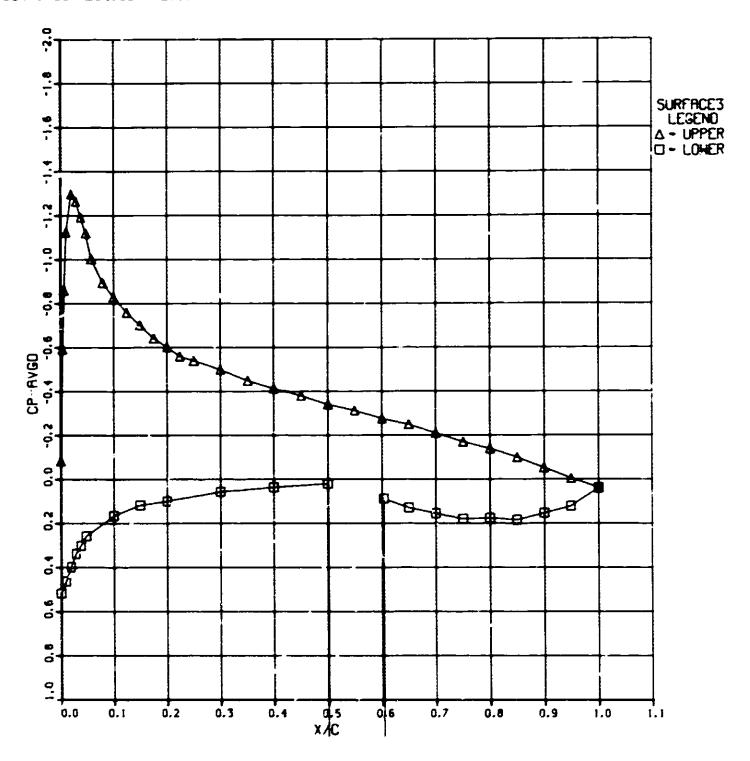


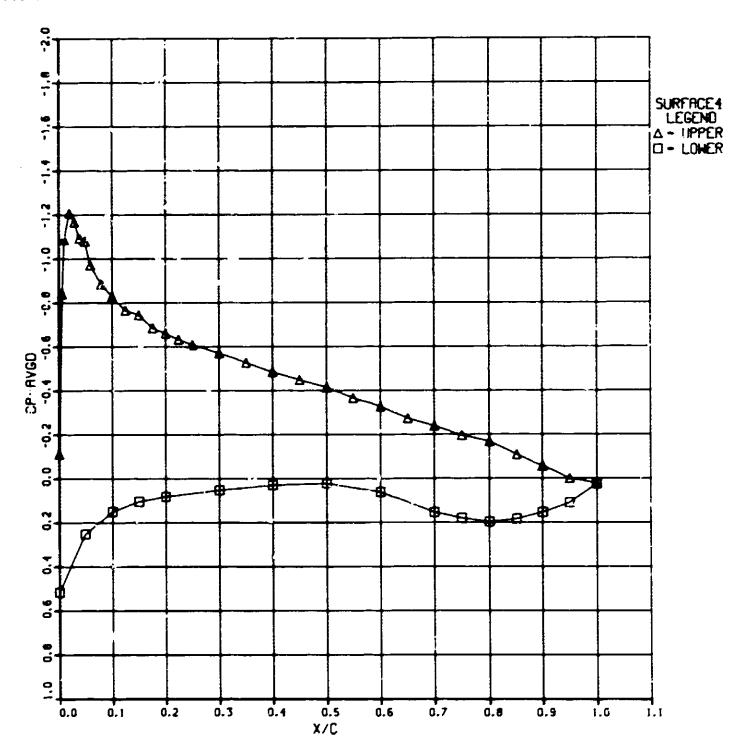


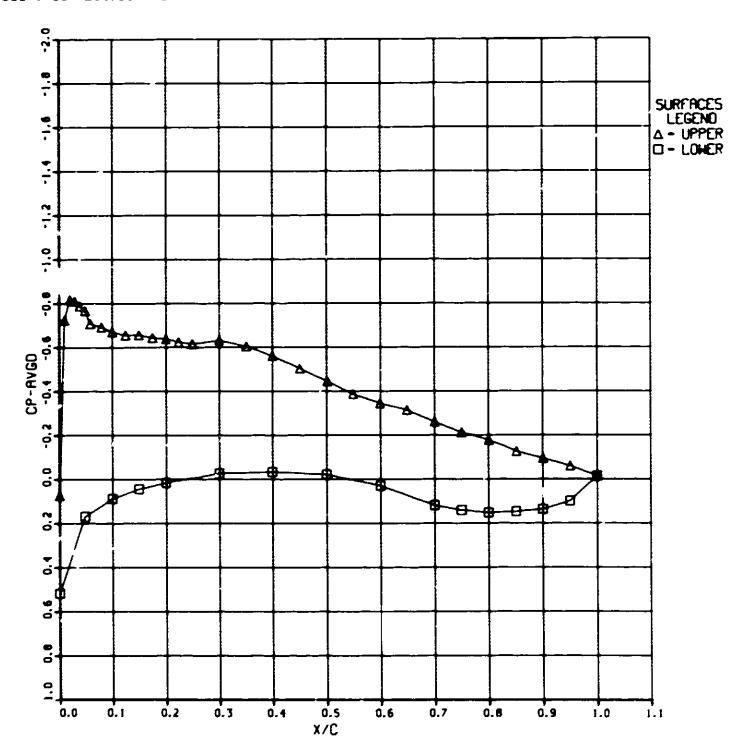




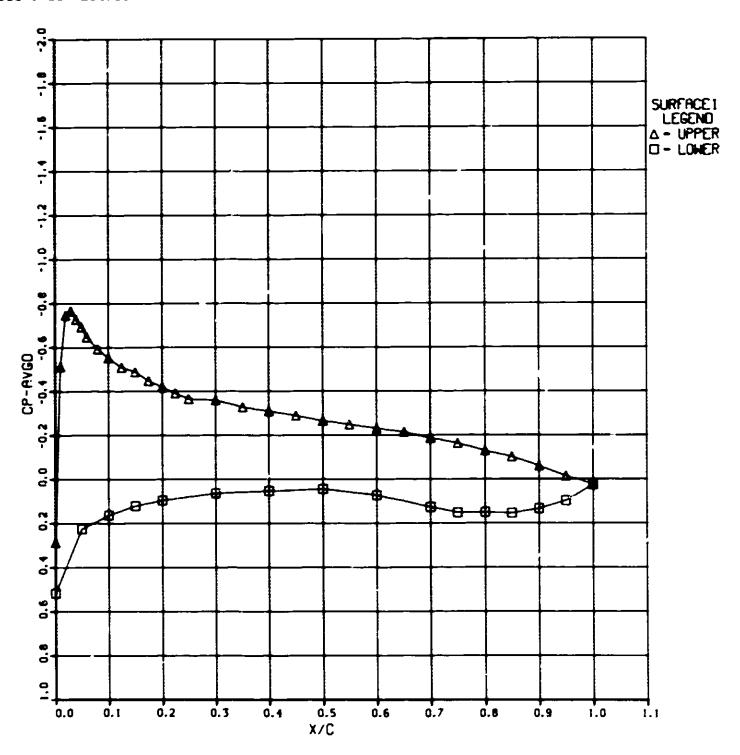


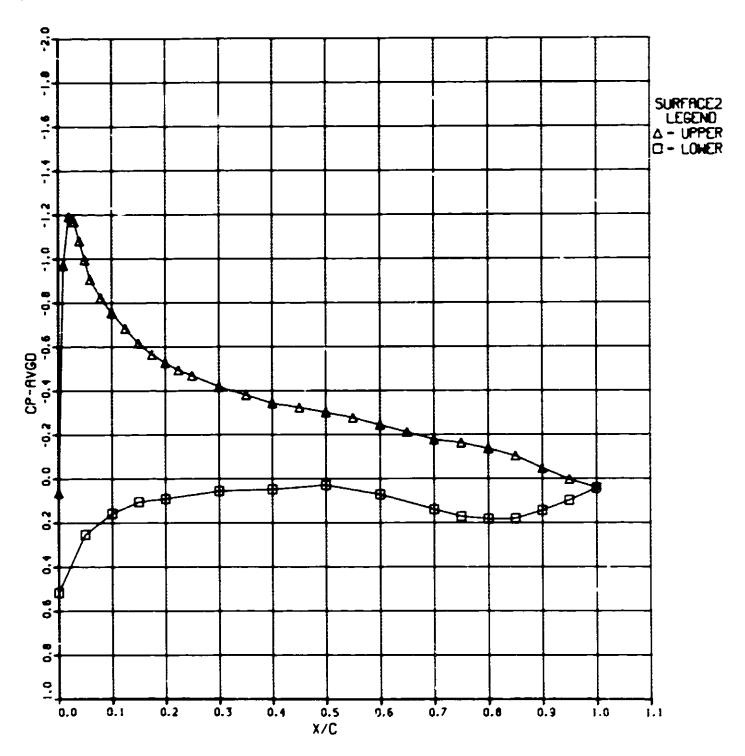


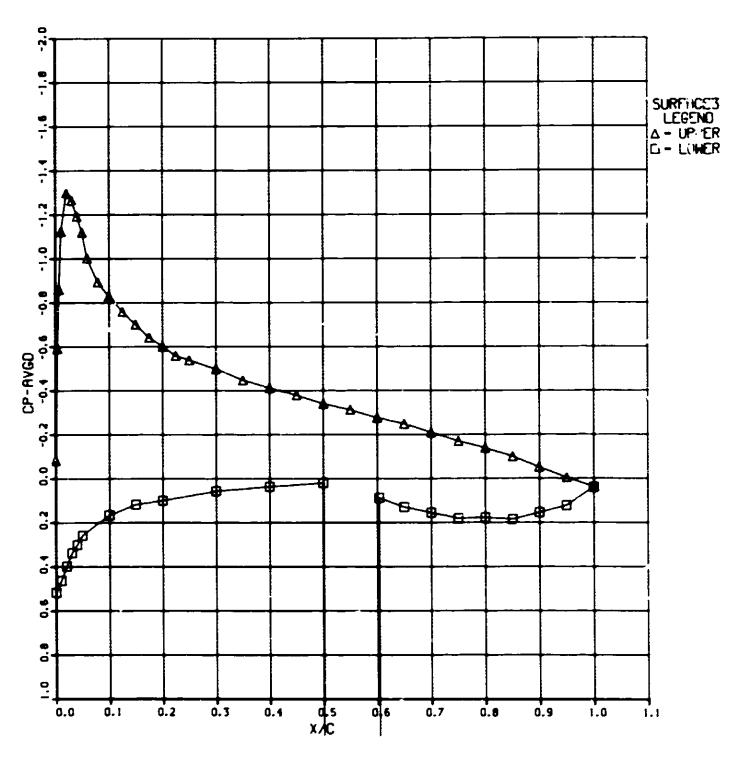


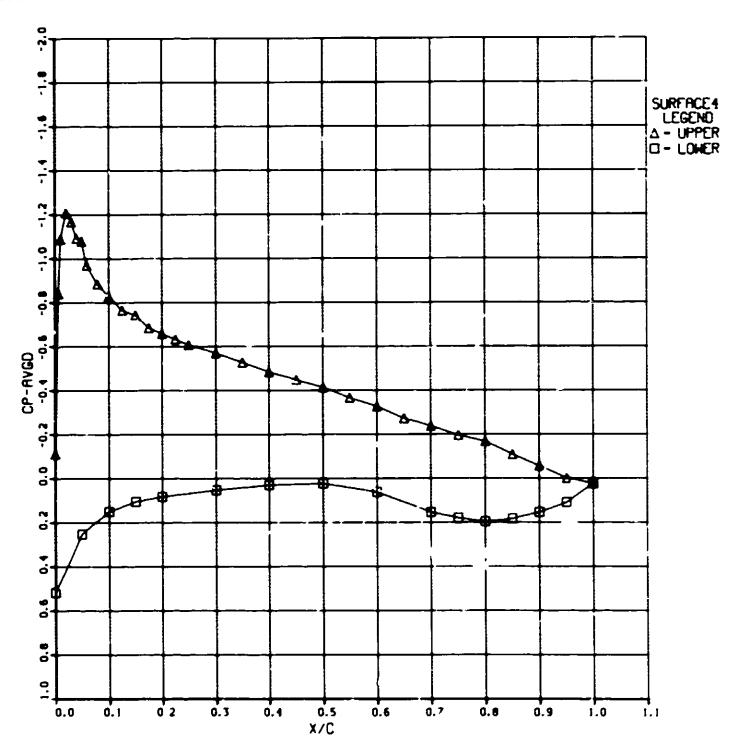


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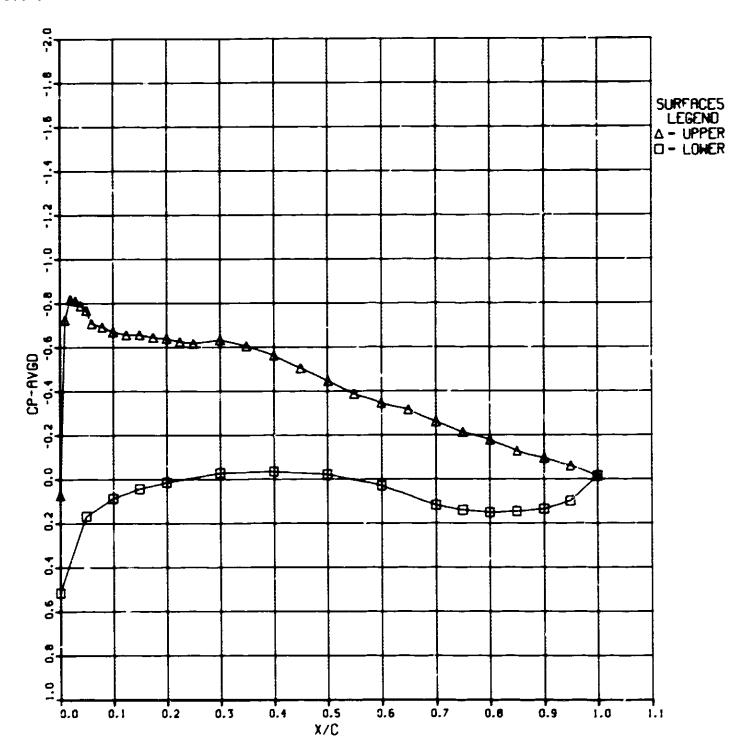


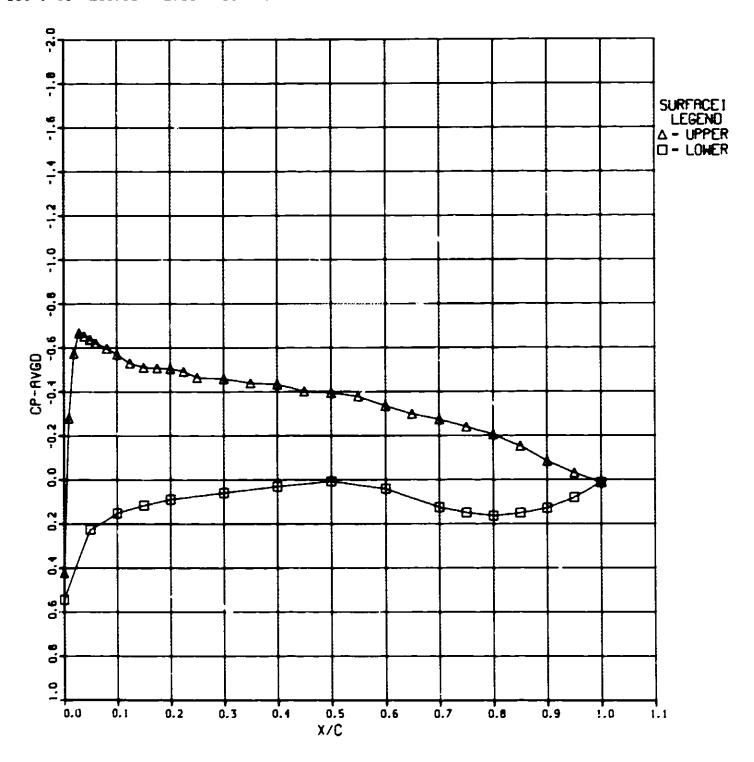


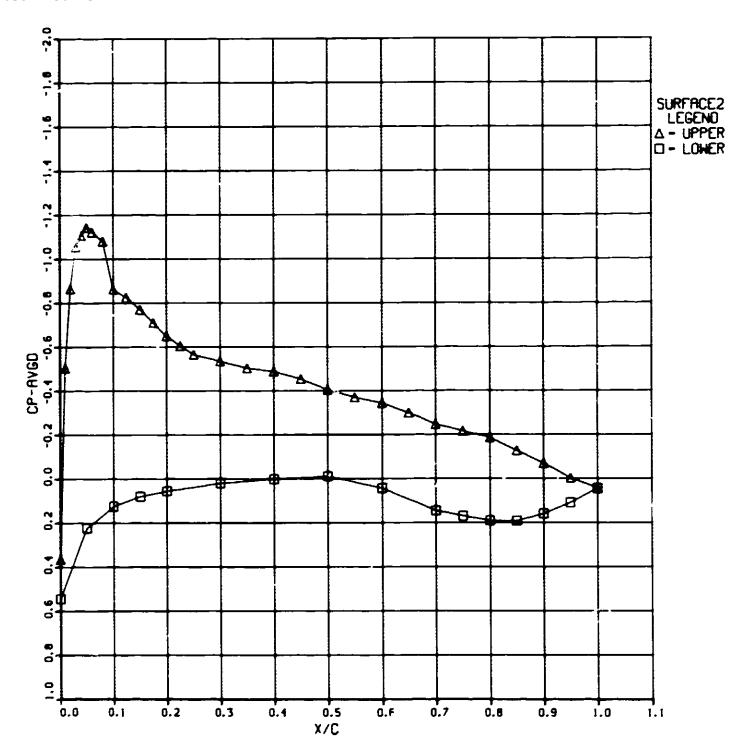


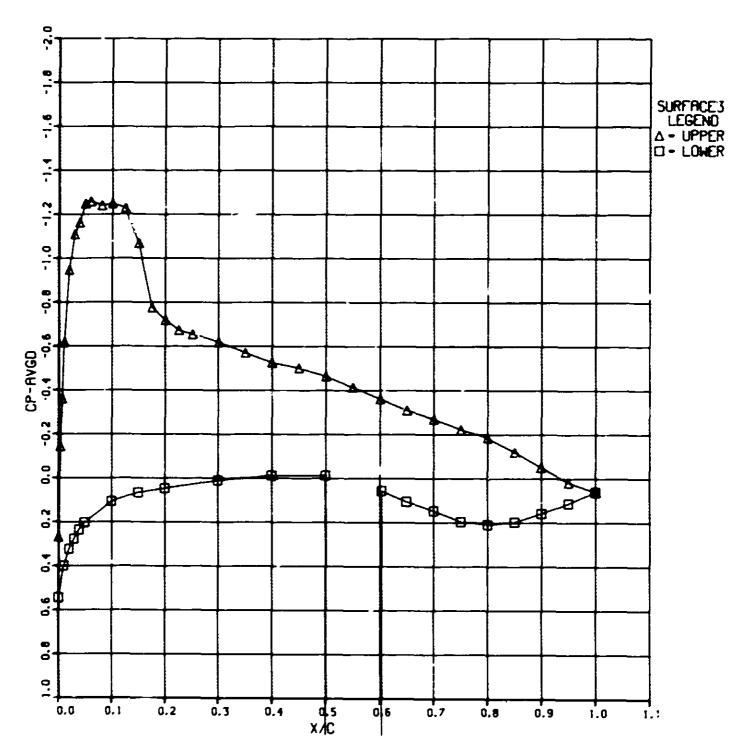


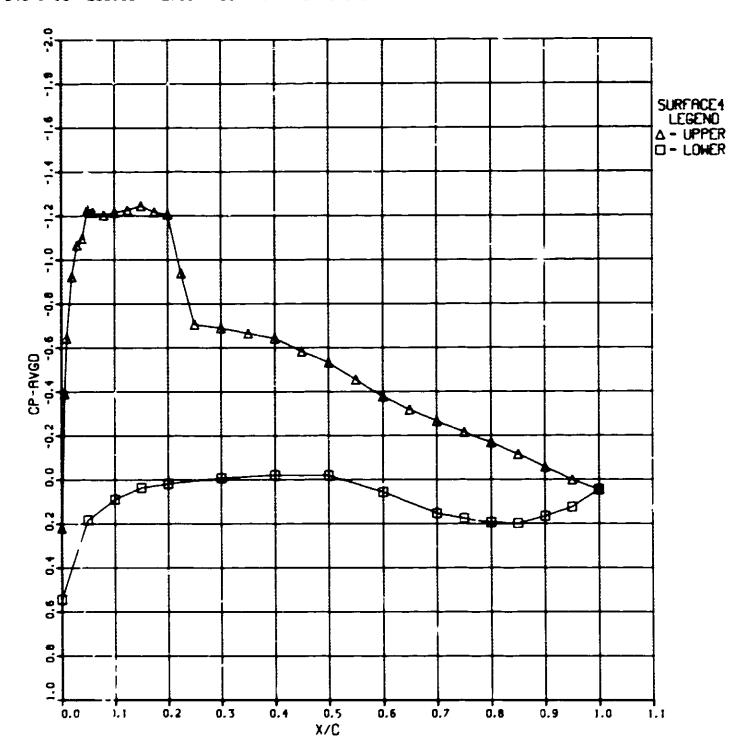
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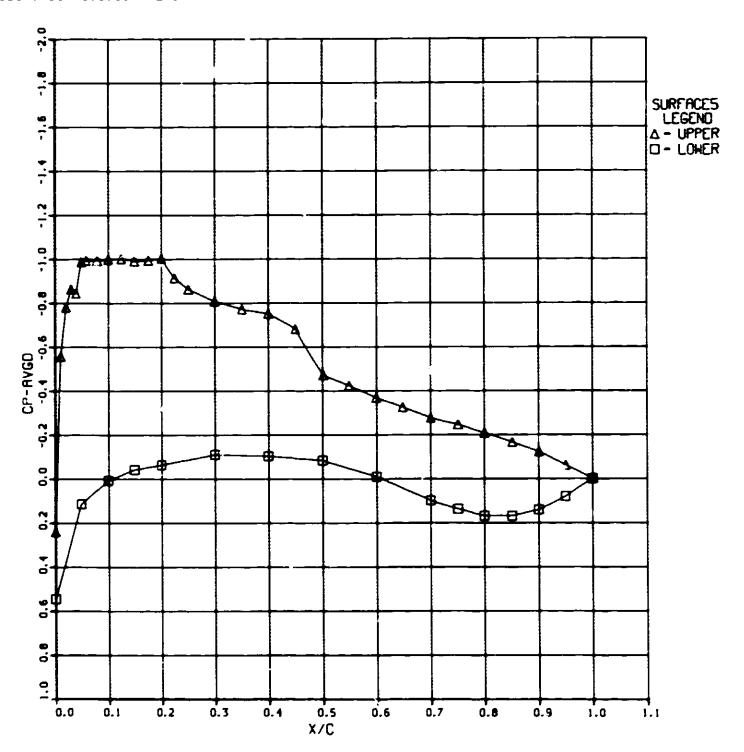


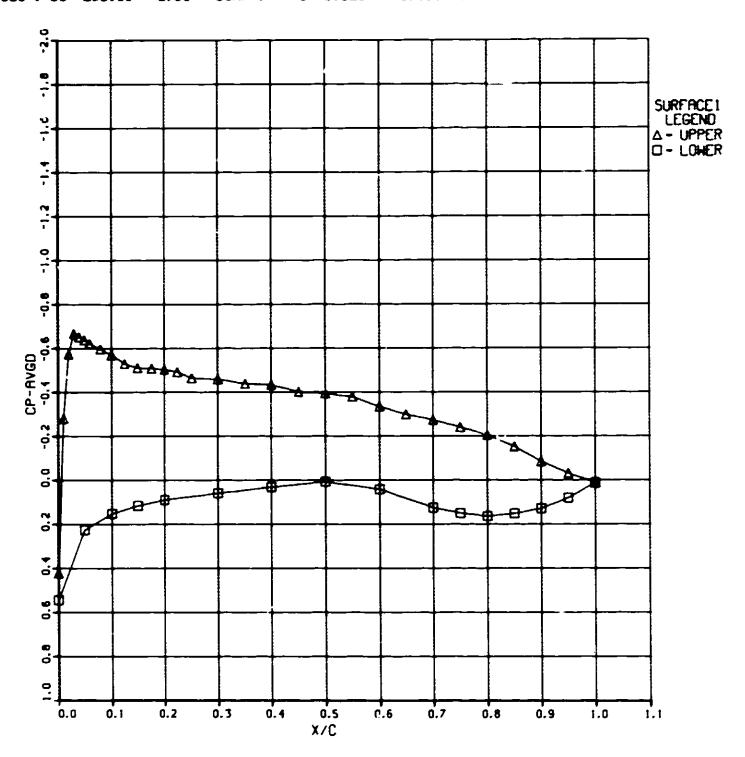




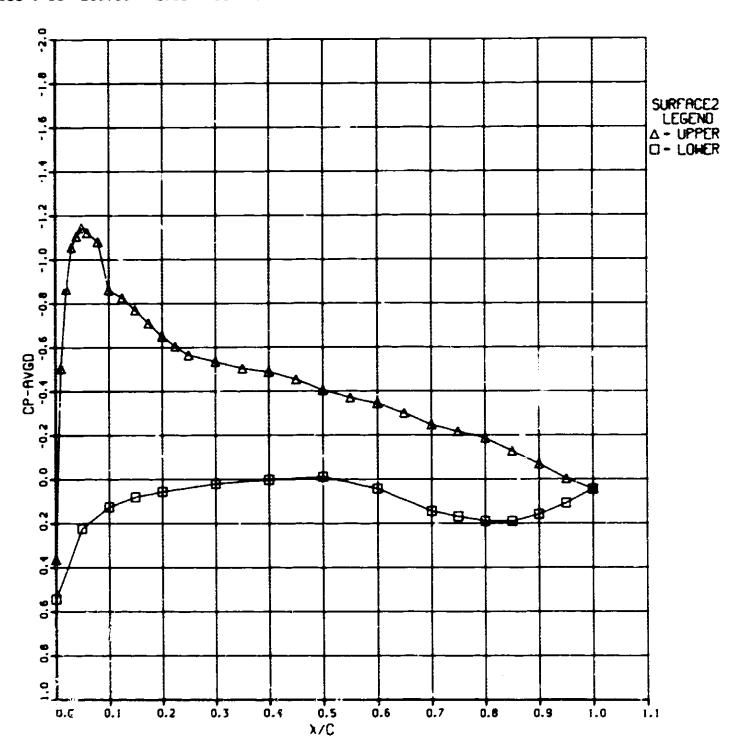


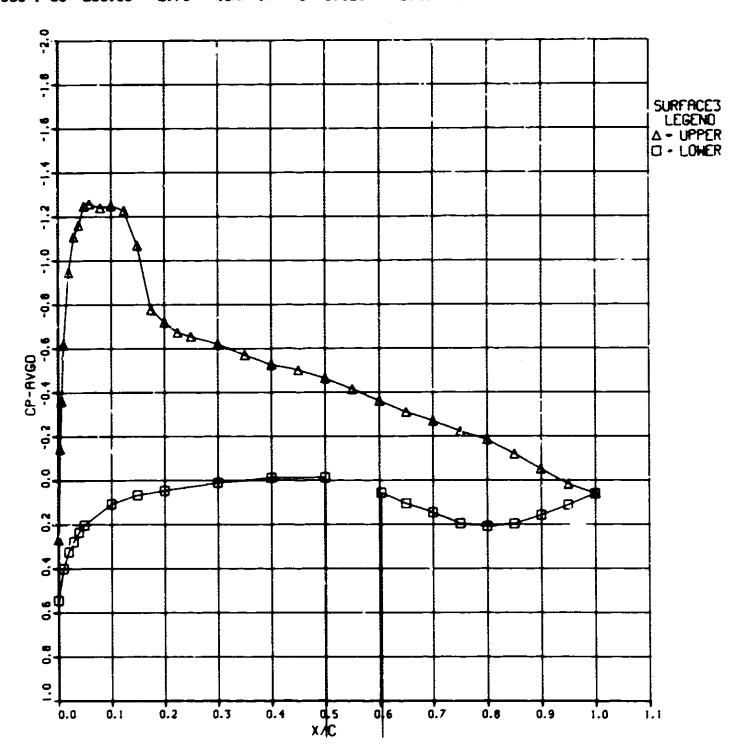


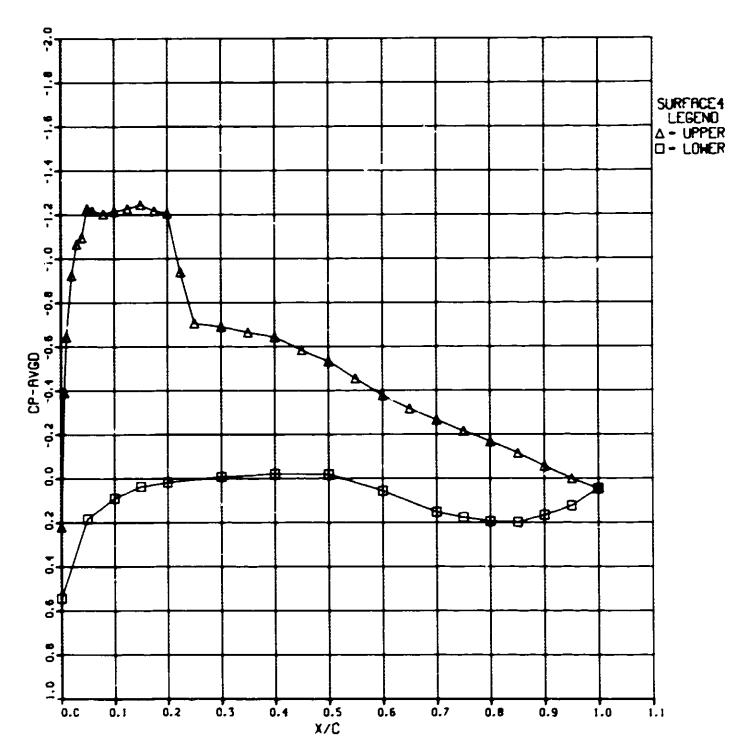


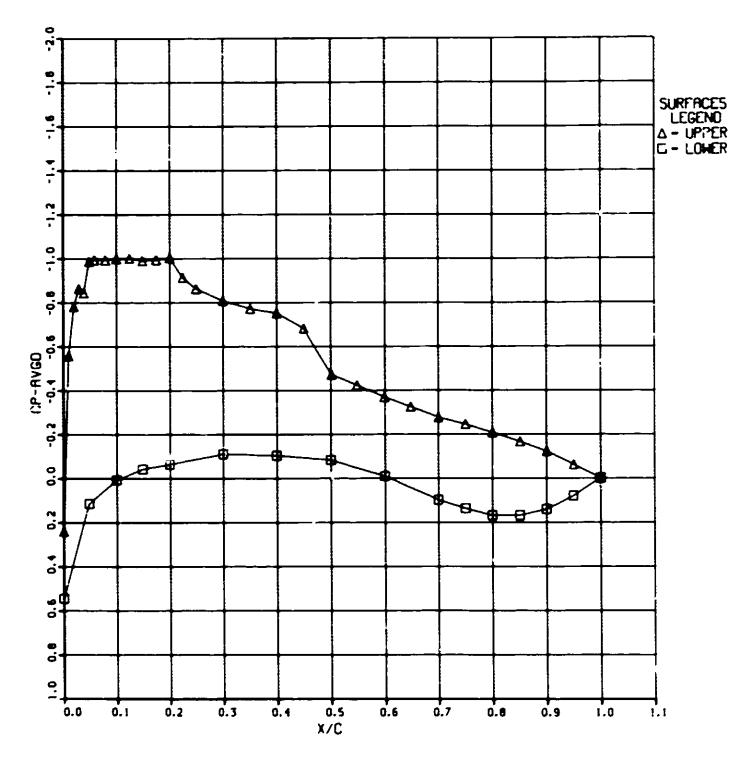


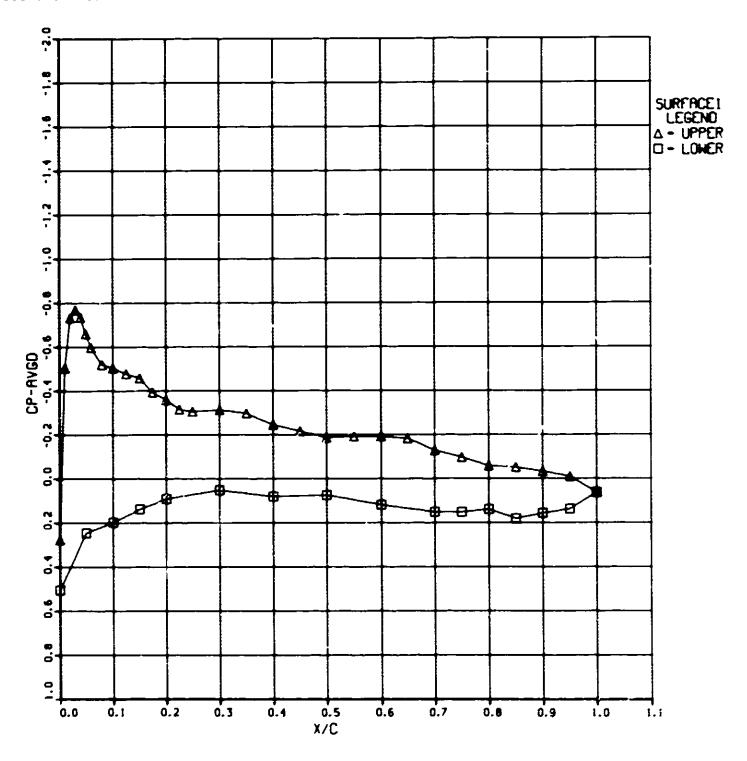
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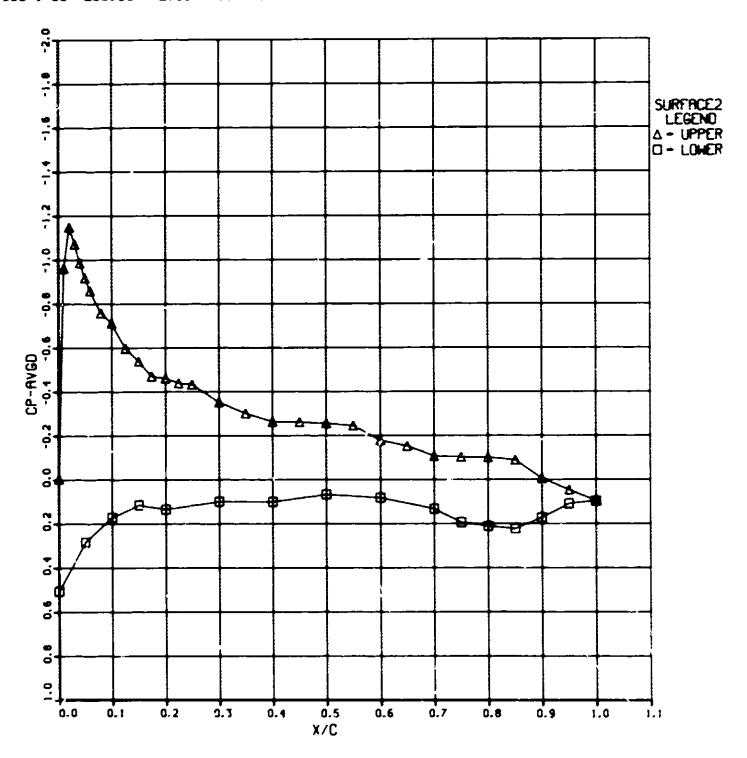


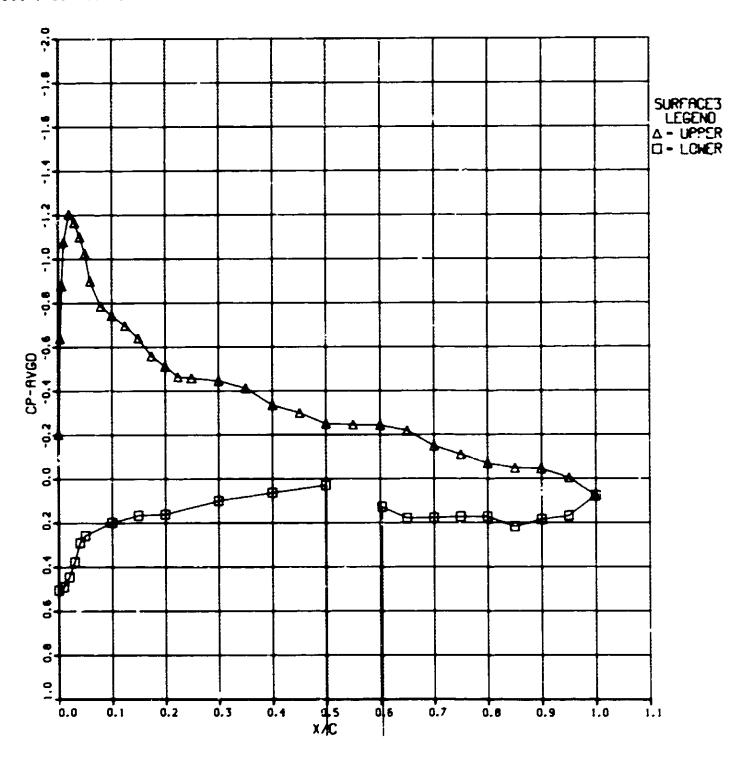


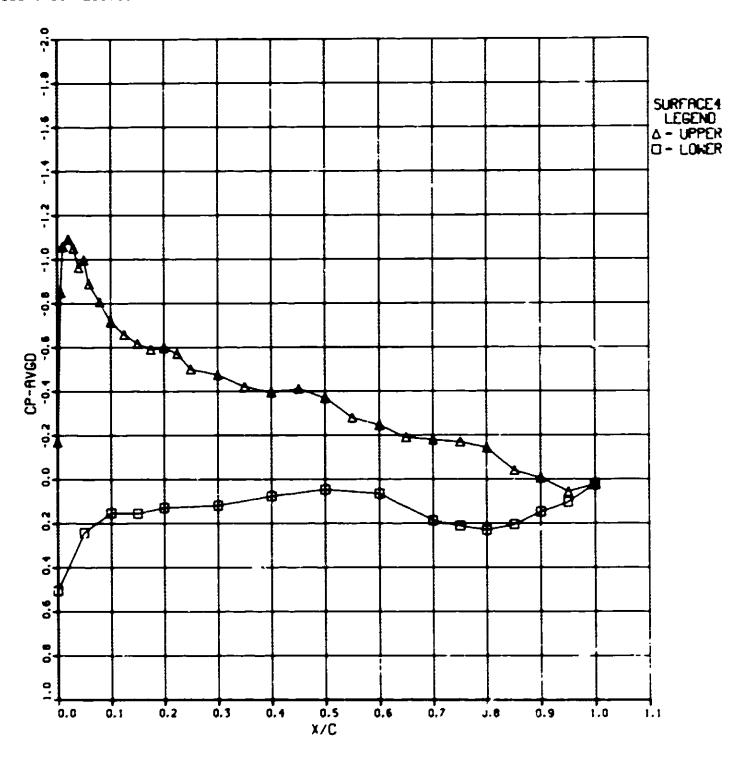


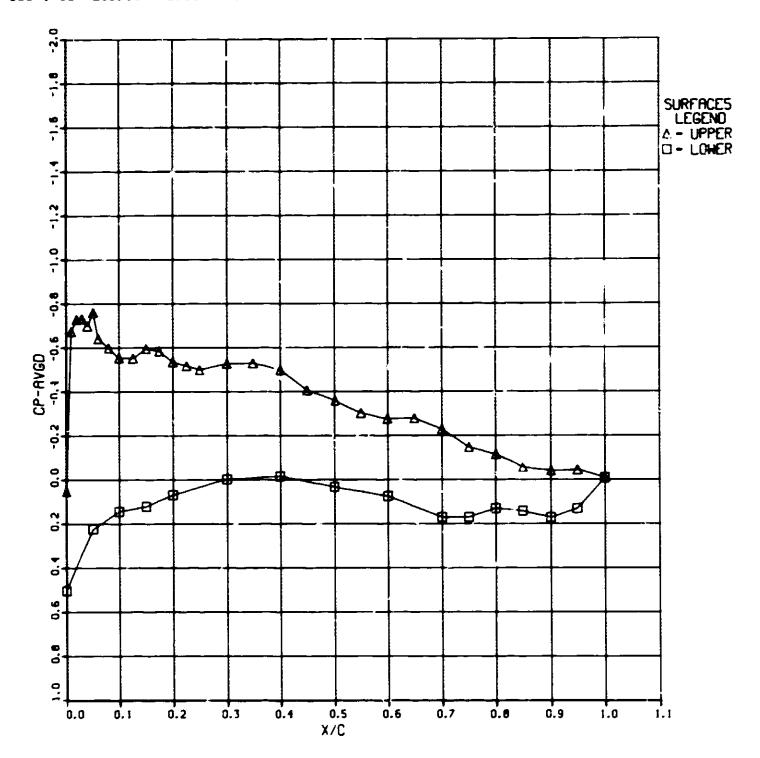












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15. Supplementary Notes Point of Contact: Earl R. Keener, M/S 227-8, Ames Research Center, Moffett Field, CA 94035 (415)694-6260 or FTS 464 6260				
Experimental surface-pressure distributions and oil-flow photographs are presented for a 0.90 m semispan model of NASA/Lockheed Wing C, a generic transonic, supercritical, low-aspectratio, highly 3-dimensional configuration. This wing was tested at the design angle of attack of 5° over a Mach number range from 0.25 to 0.96, and a Reynolds number range from 3.4×10° to 10×10°. Pressures were measured with both the tunnel floor and ceiling suction slots open for most of the tests but taped closed for some tests to simulate solid walls. A comparison is made with the measured pressures from a small-scale model in a high Reynolds number facility and with predicted pressures using two three-dimensional (3-D), transonic full-potential-flow wing codes: design code FLO22 (nonconservative) and TWING code (conservative). At the given design condition, a small region of flow separation occurred. At a Mach number of 0.82 the flow was unseparated and the surface flow-angles were less than 10°, indicating that the boundary-layer flow was not 3-D. Evidence from this study, and from other cited wing studies, indicate that wings that are optimized for mild shock waves and mild pressure-recovery gradients generally have small 3-D boundary-layer flow at design conditions for unseparated flow.				
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